INSTRUMENTATION: TOF, 004 - 021

WP 004 **Surface Probing Mass Spectrometry as a Differential Biomarker Monitoring Method**; Mariam S ElNaggar; Richard A Mathies; Evan R. Williams; *University of California, Berkeley, CA*

WP 005 **Method to Improve the Dynamic Range Characteristics of Microchannel Plate-Based Ion Detectors, and Its Effect on Performance of TOF-MS**; Masahiro Hayashi[1]; Hisanao Hazama[2]; Yasuhide Naito[3]; Masahiko Iguchi[4]; Akio Suzuki[1]; Toshiyuki Uchiyama[1]; Katsutoshi Nonaka[1]; Kunio Awazu[2]; *[1]Hamamatsu Photonics K.K., Iwata, Shizuoka, JAPAN; [2]Graduate School of Engineering, Osaka University, Suita, Osaka, Japan; [3]GPI, Hamamatsu, Shizuoka, Japan; [4]Hamamatsu Corporation, Bridgewater, NJ*

WP 006 **The Impact of Resolution on Accurate Mass Measurements of Complex Samples**; Doug Mcintyre; Patrick D. Perkins; Edgar Naegele; *Agilent Technologies, Santa Clara, CA*

WP 007 **A continuous Beam, Time of Flight Mass Spectrometer for Secondary Ion Mass Spectrometry;** Stephen P. Thompson; *SAI Ltd., Manchester, UK*

WP 008 **A High Dynamic Range Ion Detector with Bipolar Post-Acceleration and Sub-Nanosecond Pulse Widths;** Stephen Ritzau[1]; Bruce Laprade[1]; Paul Mitchell[2]; *[1]Photonis USA, Inc., Sturbridge, MA; [2]Burle Industries, Lancaster, PA*

WP 009 **Introducing a New High Sensitivity Benchtop Reflectron Time of flight Mass Spectrometer (BenchTOF-dx), Incorporating On-Line Spectral Dynamic Background Compensation (DBC);** Gerhard Horner[1]; Gareth Roberts[2]; *[1]ALMSCO Ltd, Munich , Germany; [2]Markes International Ltd, Cardiff, UK*

WP 010 **Imaging Time-of-Flight Mass Spectrometry and Pattern Analysis for Characterizing Transient Gaseous Phenomena on the Moon**; Daniel E Austin; *Brigham Young University, Provo, UT*

WP 011 **Evaluation of IR Multi Photon Dissociation as a Method for High Mass Protein Clean Up;** Ayman El-Faramawy[1]; Yuzhu Guo[2]; Udo H. Verkerk[2]; Bruce Thomson[3]; K W Michael Siu[4]; *[1]MDS Analytical Technologies, Concord, Canada; [2]Crms, York University, Toronto, ON; [3]Mds Sciex, Concord, ON; [4]York University, Toronto, ON*

WP 012 **Design of a New Multi-Turn Ion Optical System for High-Performance Time-of-Flight Mass Spectrometers**; Masaru Nishiguchi[1]; Yoshihiro Ueno[1]; Osamu Furuhashi[1]; Michisato Toyoda[2]; Mitsutoshi Setou[3]; *[1]Shimadzu corporation, Kyoto, JAPAN; [2]Osaka University, Toyonaka, Osaka, Japan; [3]Hamamatsu Medical School, Hamamatsu, Shizuoka, Japan*

WP 013 **Increased Throughput and Reduced Carry-Over of Mass Spectrometry Based Proteomics using High Efficiency Non-Split Nano-Flow Parallel Dual-Column Capillary HPLC System**; Hong Wang; Sam Hanash; *PHS, Fred Hutchinson Cancer Research Center, Seattle, WA*

WP 014 **Development of a Stigmatic Mass Microscope using a Multi-Turn Time-of-Flight Mass Spectrometer, MULTUM-IMG**; Hisanao Hazama[1]; Jun Aoki[2]; Hirofumi Nagao[1]; Ren Suzuki[1]; Yasuhide Naito[3]; Michisato Toyoda[2]; Katsuyoshi Masuda[4]; Kenichi Fujii[5]; Toshio Tashima[6]; Kunio Awazu[1]; *[1]Graduate School of Engineering, Osaka University, Suita, Osaka, Japan; [2]Graduate School of Science, Osaka University, Toyonaka, Osaka, Japan; [3]GPI, Hamamatsu, Shizuoka, Japan; [4]Suntory Institute for Bioorganic Research, Mishima-gun, Osaka, Japan; [5]Osaka Institute of Technology, Hirakata, Osaka, Japan; [6]Japan Tobacco Inc., Takatsuki, Osaka, Japan*

WP 015 **Ion Trajectory Simulation of Multi-Turn TOF using Surface Charge Method Accelerated by a Special Purpose Computer**; Jun Aoki[1]; Michisato Toyoda[1]; Ayumi Kubo[1]; Hisanao Hazama[1]; Kunio Awazu[1]; Yasuhide Naito[2]; *[1]Osaka University, Osaka, Japan; [2]GPI, Hamamatsu, Japan*

WP 016 **A High Performance, Folded Geometry oa-ToF Mass Analyser Combining Single Stage and Dual Stage Reflectrons;** Jason L Wildgoose; *Waters Corporation, Manchester, UK*

WP 017 **Performance of an ESI Linear Ion Trap/Orthogonal TOF Mass Spectrometer for UV Photodissociation of Biomolecules**; Tae-Young Kim; James P. Reilly; *Indiana University, Bloomington, IN*

WP 018 **A Prototype High-Performance Axial-Time-of-Flight Mass Spectrometer for Electrospray Mass Spectrometry**; Robert Jackson; Bronson Crothers; Zhongyu Yang; Stephen Lammert; *Stillwater Scientific Instruments, Inc., Orono, ME*

WP 019 **Miniature Laser Ablation Time-of-Flight Mass Spectrometry with Reversible Polarity Capability for Analysis of Planetary Samples**; Timothy J. Cornish[1]; Catherine M. Corrigan[1]; Scott A. Ecelberger[1]; William B. Brinckerhoff[2]; *[1]Jhu/apl, Laurel, MD; [2]NASA/Goddard Space Flight Center, Greenbelt, MD*

WP 020 **The Effect of Ion Mobility Processes on the Mass Calibration of Analytes in MALDI TOFMS**; Renata Szyszka[1]; William J. Erb[2]; Kevin G. Owens[1]; *[1]Drexel University, Springfield, PA; [2]Ethicon, Somerville, Nj, NJ*

WP 021 **Electron Transfer Dissociation within a RF Travelling Wave Ion Guide Collision Cell of a QTOF**; Jeff Brown; Iain Campuzano; Steven Pringle; Richard Chapman; *Waters Micromass MS Technologies, Manchester, UK*

INSTRUMENTATION: QUADRUPOLES AND TRAPS 1, 022 - 039

WP 022 **Advanced Modeling of a QMS to Include Ion Source and Mass Filter**; Boris Brkic; Neil France; Thomas J. Hogan; Stephen Taylor; *University of Liverpool, Liverpool, UK*

WP 023 **Comparison of a Ring Ion Guide and a Quadrupole Collision Cell for Threshold Collision-Induced Dissociation Ag+(N-(methyl)n acetamide)(solvent) Bond-Energy Determinations;** Vladimir Romanov; Udo H. Verkerk; Alan C. Hopkinson; K.W. Michael Siu; *York University/ Chemistry Department, Toronto, Canada*

WP 024 **New Approaches to Supercomputer Modeling of Fields and Ion Cloud Dynamics with Total Account for Ion-Ion and image Charge Interactions**; Eugene Nikolaev[1]; Ivan Boldin[2]; Pavel Ryumin[1]; Gleb Vladimirov[2]; Ron M.a. Heeren[4]; Alexander Pozdneev[3]; Dmitrij Avtonomov[1]; *[1]The Institute for Energy Problems of Chemical Phys, Moscow, Russian Federation; [2]The Institute of Biochem. Phys. Russian Acad.Sc., Moscow, Russia; [3]Moscow State Uiversity, Dptm. of comp. math., Moscow, Russia; [4]Fom Inst. Atomic/molecular Physics, Amsterdam, Netherlands*

WEDNESDAY POSTERS

WP 025 **Reduction of Nonlinear Resonance Effects in the 3D quadrupole Ion Trap with Microscreened Endcap Holes and Optimized Endcap-to-Endcap Spacing;** Dodge L. Baluya; Richard A. Yost; *University of Florida, Gainesville, FL*

WP 026 **Off-Resonance Excitation for Ejection or Fragmentation in a Linear Ion Trap Mass Spectrometer**; James Hager; *MDS Sciex, Concord, Canada*

WP 027 **Geometrical Effect on the Performance of Ion Trap Array(ITA)**; Xiao-Xu Li[1]; Gong-yu Jiang[1]; Chan Luo[1]; Fuxin Xu[1]; Peng Yang[1]; An Hu[1]; Yuan-yuan Wang[1]; Chuan-fan Ding[1]; Li Ding[2]; *[1]Fudan University, Shanghai, China; [2]Shimadzu Research Lab (shanghai), Shanghai, China*

WP 028 **Linear Quadrupole Ion Trap for Fourier-Transform Mass Spectrometry**; Albrecht Glasmachers; Alexander Laue; *Universität Wuppertal, Wuppertal, Germany*

WP 029 **Improving the Analytical Performance of the ESI Mass Spectrometer by Coupling 2D and 3D Digital Ion Traps**; Li Ding[1]; Xiaohui Yang[1]; Jiangong Zhu[1]; Andrew Entwistle[2]; Ikuo Konishi[2]; *[1]Shimadzu Research Lab (Shanghai) Ltd., Shanghai, China; [2]Shimadzu Research Laboratory (Europe) Ltd., Mancheter, UK*

WP 030 **Adaptation of a Triple-Quadrupole Mass Spectrometer for Threshold Collision-Induced Dissociation (TCID) Measurements using a Ring Ion Guide;** Vladimir Romanov; Udo H. Verkerk; Alan C. Hopkinson; K W Michael Siu; *CRMS, Chemistry, York University, Toronto, Canada*

WP 031 **High Throughput Mass-Selective Soft Landing with Rectilinear Ion Trap in RF/DC isolation Mode**; Zongxiu Nie; Mike Goodwin; Wen-ping Peng; Michael Volny; Zheng Ouyang; R. Graham Cooks; *Purdue University, West Lafayette, IN*

WP 032 **Studies of Space Charge Effects in the Orbitrap Mass Analyzer**; Richard Perry[1]; Gary Abdiel Salazar[1]; Robert J. Noll[1]; Wolfgang Plass[2]; R. Graham Cooks[1]; *[1]Purdue University, West Lafayette, IN; [2]Justus-liebig-universitaet Giessen, Giessen, Germany*

WP 033 **Transmission Mode Ion/Ion Reactions in the Q0 Cell of a Hybrid Triple Quadrupole/Linear Ion Trap Instrument**; Joshua Emory; Scott A. Mcluckey; *Purdue University, West Lafayette, IN*

WP 034 **Design and Performance of a Halo Ion Trap Mass Analyzer**; Miao Wang[1]; Daniel E Austin[1]; Samuel Tolley[2]; Aaron Hawkins[1]; Edgar Lee[2]; Milton Lee[1]; *[1]Brigham Young University, Provo, UT; [2]Torion Technologies, Inc, Pleasant Grove, UT*

WP 035 **Mass Selective Axial Ion Ejection from a Linear Quadrupole with an 8% Added Hexapole Field**; Zilan Xiao; Donald J. Douglas; *University of British Columbia, Vancouver, BC*

WP 036 **High Pressure and Fabrication Imperfection Effects on Performance of Miniature Ion Trap and Ion Trap Array**; Wei Xu; Qingyu Song; Jeffrey Maas; Miriam Fico; Liang Gao; William Chappell; Graham Cooks; Zheng Ouyang; *Purdue University, West Lafayette, IN*

WP 037 **Metrological Characterization of the Fourier-Transform Ion Trap Mass Spectrometer**; Alexander Laue; Albrecht Glasmachers; Klaus Brockmann; *Universität Wuppertal, Wuppertal, Germany*

WP 038 **A dynamic Pressure MALDI Source Interfaced to a 3D digital Ion Trap using a Linear Ion Trap**; Andrew Entwistle[1]; Ikuo Konishi[2]; Li Ding[3]; Shinichi Iwamoto[4]; Koichi Tanaka[4]; *[1]Shimadzu Research Lab, Manchester, UK; [2]Shimadzu Research Laboratory Ltd, Manchester, UK; [3]Shimadzu Research Lab (shanghai), Shanghai, China; [4]Shimadzu Corporation, Kyoto, Japan*

WP 039 **A New Dual Cell Linear Ion Trap Configuration for Improved Quadrupole Ion Trap Performance**; Jae C. Schwartz; John E. P. Syka; Scott Quarmby; *Thermo Fisher Scientific, San Jose, CA*

ION MOBILITY, 040 - 064

WP 040 **Mass Accuracy and Dynamic Range in Ion Mobility-Mass Spectrometry Measurements: ADC vs. TDC**; Brian H. Clowers; Mikhail Belov; David Prior; William F. Danielson; Richard D. Smith; *Pacific Northwest National Laboratory, Richland, WA*

WP 041 **Ion Mobility Orthogonal Time-of-Flight Mass Spectrometry (IMS–oaTOF-MS) for the Analysis of Small Molecules using an Atmospheric Solids Analysis Probe**; Martin Green; Steven D Pringle; Kevin Giles; Hilary Major; *Waters Corporation, Manchester, UK*

WP 042 **A High Flow Rate DMA with High Transmission and Resolution Designed for New API Instruments**; Juan Rus[1]; David Moro[1]; Juan A. Sillero[1]; Jordi Freixa[1]; Juan Fernandez De La Mora[2]; *[1]SEADM, Boecillo, SPAIN; [2]Yale University - Mechanical Engineering Departmen, New Haven, CT*

WP 043 **Determining Ion Mobility Values using a Travelling Wave Separator**; Kevin Giles; Jason L Wildgoose; David Langridge; *Waters Corporation, Manchester, UK*

WP 044 **A Next Generation MALDI-Ion Mobility-Surface-induced Dissociation-Time-of-Flight Mass Spectrometer with Novel Collision Source Configurations**; Wenjian Sun[1]; Kent Gillig[2]; Liuxi Chen[2]; David H. Russell[2]; *[1]Shimadzu Research Laboratory (Shanghai) Co., Ltd., Shanghai, China; [2]Texas A&M University, College Station, TX*

WP 045 **Protein and Protein Complex Conformation Studies by Ion/Ion Reaction Coupled with Ion Mobility MS**; Qin Zhao[1]; Matthew Soyk[1]; Gregg Schieffer[1]; Ethan R. Badman[2]; R. S. Houk[1]; *[1]Iowa State University, Ames, IA; [2]Hoffmann-la Roche Inc., Nutley, NJ*

WP 046 **Separation Factors for Rapid Gas Phase Chiral Separation**; Christopher Hilton[1]; Alison E. Holliday[2]; Clinton Krueger[1]; Herbert H Hill[3]; Ching Wu[1]; Mark Osgood[1]; *[1]Excellims Corporation, Maynard, MA; [2]Swarthmore College, Swarthmore, PA; [3]Washington State Universtiy, Pullman, WA*

WP 047 **Comparative Study of Positive/Negative Ion Gas-Phase Conformations by MALDI-IM-TOFMS**; Liuxi Chen; Kent Gillig; David H. Russell; *Texas A&M University, College Station, TX*

WP 048 **Ion Mobility Spectrometry at Pressures above Atmospheric**; Eric J. Davis; Maggie Tam; Prabha Dwivedi; Bill Siems; Herbert H Hill; *Washington State Universtiy, Pullman, WA*

WP 049 **Evaluation of Nanoelectrospray – Ion Mobility Spectrometry – Condensation Particle Counting for Determining the Size and Molecular Mass of Biomolecules**; Efthymios Kapellios; Chiara Carazzone; Spiros Pergantis; *University of Crete, Heraklion, Greece*

WP 050 **Clustering Analysis of IM-MS Data**; Lei Tao[1]; David B. Dahl[2]; Lisa M. Pérez[1]; David H. Russell[1]; *[1]Texas A&M University, Department of Chemistry, College Station, Tx; [2]Texas A&M University, Department of Statistics, College Station, TX*

WP 051 **Overtone Mobility Spectrometry and Its Utility for Biomolecule Analysis**; Ruwan T. Kurulugama; Fabiane

M. Nachtigall; David E. Clemmer; *Indiana University, Bloomington, IN*

WP 052 **Evaluation of Linear Injection and Orthogonal Injection into Planar FAIMS-MS**; Leonard Rorrer; Marilyn Prieto; Richard A. Yost; *University of Florida, Gainesville, FL*

WP 053 **Effect of FAIMS Electrode Shape on Transmission Efficiency**; Michael Belford; Jean-jacques Dunyach; Mark Hardman; *Thermo Fisher Scientific, San Jose, CA*

WP 054 **A Dual-Source Electrospray/MALDI Ion Mobility-Mass Spectrometer for Biomolecular Structural Characterization**; Sevugarajan Sundarapandian; Michal Kilman; John A. Mclean; *Vanderbilt University, Nashville, TN*

WP 055 **Using LC-IMS-MS to Increase High-Throughput Peptide Identifications**; Eric A. Livesay[1]; Erin S. Baker[1]; Daniel J. Orton[1]; Ronald J. Moore[1]; William F. Danielson[1]; Brian L. LaMarche[2]; Athena A. Schepmoes[1]; Derek F. Hopkins[2]; Keqi Tang[1]; Richard D. Smith[1]; *[1]Pacific Northwest National Laboratory, Richland, WA; [2]Environmental Molecular Sciences Laboratory, Richland, WA*

WP 056 **Gas-Phase Structure Dependence on the Ion Temperature in IMS. Experimental and Theoretical Results;** Francisco Alberto Fernandez Lima; Christopher Becker; Lisa M. Perez; Kent Gillig; Shane Tichy; William K. Russell; David H. Russell; *Texas A&M University, College Station, TX*

WP 057 **Determining the Structures of Macromolecular Assemblies using Restraints from Gas-Phase Measurements**; Brandon T. Ruotolo[1]; Ah Young Park[1]; Daniel Hirschberg[1]; Daniel Barsky[2]; Carol V. Robinson[1]; *[1]Cambridge University, Cambridge, UK; [2]Lawrence Livermore National Laboratory, Livermore, CA*

WP 058 **NanoES Charge Reduction Ion Mobility and Parallel Ion Mobility Spectrometry: New Tools for Analytical and Preparative Applications of Nano(Bio)Objects**; Christian Laschober[1]; Anne Maisser[2]; Dieter Blaas[3]; Wladyslaw Szymanski[2]; Guenter Allmaier[1]; *[1]Vienna University of Technology, Vienna, Austria; [2]University of Vienna, Vienna, Austria; [3]Medical University of Vienna, Vienna, Austria*

WP 059 **Design of a Hemispherical FAIMS Cell**; Marilyn Prieto; Jennifer Bryant; Todd Prox; Richard A. Yost; *University of Florida, gainesville, FL*

WP 060 **Optimization of Parameters for Protein and Peptide Analysis using High Field Asymmetric Waveform Ion Mobility Spectrometry (FAIMS);** Jonathan C. Mcnally [2]; Sucharita Dutta[1]; Julie Horner[3]; *[1]Thermo Fisher, San Jose, CA; [2]Thermofisher Scientific, San Francisco, CA; [3]Thermo Fisher Scientific, San Jose, CA*

WP 061 **Evaluation of the Analytical Characteristic of a Differential Mobility Analysis Coupled to a Triple Quadrupole System (DMA-MSMS)**; Hassan Javaheri [1]; Yves Le Blanc[1]; Bruce A. Thomson[1]; Juan Fernandez de la Mora[2]; Juan Rus[3]; Juan Antonio Sillero Sepúlveda[3]; *[1]Mds Sciex, Concord, ON; [2]Yale University, New Haven, CT; [3]SEADM, Valladolid, Spain*

WP 062 **Characterization and Use of Drift Times from Features in LC-IMS-MS Experiments**; Erin Baker; Anoop M. Mayampurath; Navdeep Jaitly; Brian H. Clowers; Rui Zhao; Keqi Tang; Eric A. Livesay; Daniel J. Orton; William F. Danielson III; Mikhail Belov; Richard D. Smith; *Pacific Northwest National Laboratory, Richland, WA*

WP 063 **Increased Performance in Dual-Gate Ion Mobility Spectrometry Through the Use of a Novel Gate Pulse Sequence**; Brian Webb; Nathan Kaiser; James E. Bruce; *Washington State University, Pullman, WA*

WP 064 **Simulation of Ion Motion in a Travelling Wave Mobility Separator using a Hard-Sphere Collision Model**; David Langridge; Kevin Giles; John B Hoyes; *Waters Corporation, Manchester, UK*

ELEMENTAL ANALYSIS AND SPECIATION, 065 - 071

WP 065 **Lanthanide and Actinide Nitrate Behavior in Water/Alcohol Media Studied by ESI-MS and ESI-MSn;** Jean Jacques Gaumet [1]; Anita K. Gianotto[2]; Gary Groenewold[2]; Christopher M Leavitt[3]; Michael J. Van Stipdonk[3]; Frédéric Aubriet[1]; *[1]Lsmcl, Metz University, Metz, France; [2]Ineel, Idaho Falls, ID; [3]Wichita State University, Wichita, KS*

WP 066 **TOF SIMS Analysis of Zirconium Metals**; Handong Liang; Wenpan Li; Dongxu Sun; *China University of Mining and Technology, Beijing, CHINA*

WP 067 **Pulsed Glow Discharge Mass Spectrometry: An Ionization Source for Aerosol Analysis**; Farzad Fani-Pakdel; Benjamin W. Smith; James D. Winefordner; Nicolo Omenetto; *University of Florida, Gainesville, FL*

WP 068 **Speciation of Divalent and Trivalent Metals by ESI-MS: Comparison of Some Characteristics Among Hydrolyzed Metal Species**; Tatsuya Urabe[1]; Takahisa Tsugoshi[2]; Michihiro Aimoto[3]; Miho Tanaka[1]; *[1]Tokyo University of Marine Science and Technology, Tokyo, Japan; [2]AIST, Ibaraki, Japan; [3]Nippon Steel Corp., Chiba, Japan*

WP 069 **Determination of Toxic Heavy Metals in Feminine Hygiene Products**; Jeoung Hwa Shin[1]; Kyu Keon Lee[2]; Yun Gyong Ahn[1]; *[1]korea Basic Science Institute, Seoul, South Korea; [2]Seojeong College, Yang-Ju , South Korea*

WP 070 **Qualitative and Quantitative Analysis of Antisense Oligonucleotides by Oxygen Reaction in an Octopole Collision Cell via ICPMS**; Kirk Lokits; Patrick A. Limbach; Joseph A. Caruso; *University of Cincinnati, Cincinnati, OH*

WP 071 **Analysis of Arsenic Compounds in Fish by CE/ESI-ToF-MS and CE/ICP-MS**; Björn Meermann; Marc Bartel; Andy Scheffer; Martin Vogel; Uwe Karst; *University of Münster, Münster, Germany*

AGRICULTURE, 072 - 084

WP 072 **Analysis of Aminoglycoside Residues in Milk by Electrospray LC-MSn after Derivatization with Phenyl Isocyanate**; Sherri B. Turnipseed[1]; Susan B. Clark[1]; Christine M. Karbiwnyk[1]; Wendy C. Andersen[1]; Keith E. Miller[2]; Mark R. Madson[1]; *[1]FDA, Denver Federal Center, Denver, CO; [2]University of Denver, Denver, CO*

WP 073 **Quantitative Assay of Dimethoate in Foods by Liquid Chromatography Tandem Mass Spectrometry and Isotope Dilution**; Leonardo Di Donna[1]; Barbara Macchione[1]; Fabio Mazzotti[1]; Enzo Perri[2]; Giovanni Sindona[1]; *[1]Università della Calabria Dipartimento di Chimica, Arcavacata di Rende, ITALY; [2]Istituto Sperimentale per l'Olivicoltura, Arcavacata di Rende, Italy*

WP 074 **DESI-MS Analysis of Mycotoxins from Grain Matrices**; Mark Busman; *USDA-ARS, Peoria, IL*

WP 075 **Electrospray Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry of Citric Fruit Juices and Peel Oils: Characterization and Comparison**; Alan G. Marshall [1]; Mark R Crosswhite[2]; *[1]Ion Cyclotron Resonance Prog, Tallahassee, FL; [2]Florida State University, Tallahassee, FL*

WP 076 **Proteome Evaluation of Medicago Truncatula Cell Cultures using Monolithic Capillary 2D-LC-MS-MS**; Mohamed Bedair[1]; Zhentian Lei[1]; Bonnie S. Watson[1]; Lloyd W. Sumner[2]; *[1]Samuel Roberts Noble Foundation, Ardmore, OK; [2]The Noble Foundation, Ardmore, OK*

WP 077 **Detection and Validation of a Retrotransposon-Like Protein, PEG11, Over-Expressed in Callipyge Sheep Skeletal Muscle**; Michelle Colgrave[1]; Keren Byrne[1]; Tony Vuocolo[1]; Roger Pearson[1]; Noelle Cockett[2]; Chris Bidwell[3]; Ross Tellam[1]; *[1]CSIRO, St Lucia, Australia; [2]Utah State University, Logan, UT; [3]Purdue University, West Lafayette, IN*

WP 078 **Identification and Label-Free Quantification of Medicago truncatula Vacuolar Membrane Proteins using 2D LC-MS-MS**; Zhentian Lei[1]; Narumon Sawasdipuksa[2]; Polkit Sangvanich[2]; Lloyd W. Sumner[1]; *[1]The Samuel Roberts Noble Foundation, Ardmore, OK; [2]Chulalongkorn University, Bangkok, Thailand*

WP 079 **Monitoring the Degradation of the Insecticides Thiamethoxam and Imidacloprid by Zero-Valent Metals in Water by Electrospray Ionization Mass Spectrometry**; Rodinei Augusti; Renata Pereira Lopes; Ana Paula Fonseca Maia de Urzedo; Clésia Cristina Nascentes; *Federal University of Minas Gerais, Belo Horizonte/ MG, Brazil*

WP 080 **Proteomic Analysis of *Pithecellobium dulce* (Manila Tamarind) Seeds using Two-Dimensional Gel Electrophoresis and Tandem Mass Spectrometry**; Narumon Sawasdipuksa[1]; Zhentian Lei[2]; Lloyd W. Sumner[2]; Polkit Sangvanich[1]; *[1]Chulalongkorn University, Bangkok, Thailand; [2]The Samuel Roberts Noble Foundation, Ardmore, OK*

WP 081 **Ultra Fast Quantifications of Sulfamerazine, Sulfamethoxazole, Sulfadimethoxine and Sulfamethazine Residues in Milk using LDTD-APCI-MS-MS**; Sébastien Sauvé[1]; Patrice Tremblay[2]; Pedro A. Segura[1]; Pierre Picard[2]; Serge Fortier[3]; Luc Gagnon[3]; *[1]Université de Montréal, Montreal, QC, Canada; [2]Phytronix Technologies, Quebec, QC, Canada; [3]MAPAQ, Sainte-Foy, QC, Canada*

WP 082 **Chemical Analysis and Identification of Compounds Present in Stable Fly (Stomoxys calcitrans L.) Feces**; Brian P. Quinn; Ulrich R. Bernier; Jerome A. Hogsette; *USDA-ARS-CMAVE, Gainesville, FL*

WP 083 **Developing a Method for Rapid Detection of Wheat Insects using MALDI QqTOF Mass Spectrometry with HPLC**; Yuwei Qian[1]; Ke Sun[2]; Victor Spicer[1]; Werner Ens[1]; Digvir Jayas[2]; Noel White[3]; Oleg Krokhin[1]; *[1]Physics and Astronomy, University of Manitoba, Winnipeg, Manitoba, Canada; [2]Biosystems Engineering, University of Manitoba, Winnipeg, Manitoba, Canada; [3]Agriculture and Agri-Food Canada, Winnipeg, Manitoba, Canada*

WP 084 **Analysis of Clenbuterol in Meat and Feedstuff by LC-MS-MS**; N.T. Thu Thuy[1]; L.V. Xu[1]; P. T. Anh[1]; T. K. Tinh[1]; C.P. Ngoc Son[1]; Kefei Wang[2]; *[1]Center for Education and Development in Chromatogr, Ho Chi Minh City, Vietnam; [2]Thermo Fisher Scientific, San Jose, CA*

ION ACTIVATION, 085 - 101

WP 085 **CID Fragmentation Rearrangement of Buspirone Confirmed by LTQ-Orbitrap FT Mass Spectrometer**; Austin Li[1]; Xiang-yu Jiang[2]; *[1]Covance Laboratory, Inc., Sun Prairie, WI; [2]Covance - 08, Waunakee, WI*

WP 086 **Ultraviolet Photodissociation of Fluorescently-Labeled Oligosaccharides in a Quadrupole Ion Trap Mass Spectrometer**; Jeff Wilson; Jennifer Brodbelt; *University of Texas at Austin, Austin, TX*

WP 087 **Experimental Strategies for Determining Inner Shell Hydration Energies of Alkaline Earth Metal Dications**; Damon R Carl[1]; Robert M. Moision[2]; Peter B. Armentrout[1]; *[1]University of Utah, Salt Lake City, UT; [2]University of California San Diego, La Jolla, CA*

WP 088 **Identification of Bis-aryl Hydrazone Crosslinked Peptides by Ultraviolet Photodissociation Mass Spectrometry**; Myles Gardner; Jennifer Brodbelt; *University of Texas - Austin, Austin, TX*

WP 089 **Ultraviolet (355 nm) Photodissociation of Small Chromophore-Containing Molecules on a Hybrid QqTOF Mass Spectrometer**; Changtong Hao[1]; Yves Le blanc[2]; Udo Verkerk[1]; Alexandre Loboda[2]; Bruce Thomson[2]; K W Michael Siu[1]; *[1]CRMS, York University, Toronto, ON, Canada; [2]MDS Analytical Technologies, Concord, ON, Canada*

WP 090 **Measuring the Effective Temperature of Vibrationally Excited Ions**; Alessandra L. Ferzoco; Gary L. Glish; *University of North Carolina, Chapel Hill, NC*

WP 091 **Fragmentation Mechanistic Study of TRA Analogs using High Resolution High Mass Accuracy Multistage Orbitrap Mass Spectrometer**; Wendy Zhong; *Schering-Plough, Summit, NJ*

WP 092 **Coupling of an FT-ICR Mass Spectrometer with a VUV Beamline**; Roland Thissen[7]; Jean-Marc Bizau[6]; Joel Lemaire[2]; Christophe Blancard[3]; Marcello Coreno[4]; Christophe Dehon[2]; Christophe Nicolas[1]; Pietro Franceschi[5]; Alexandre J. Giuliani[1]; *[1]Synchrotron Soleil, Gif-sur-Yvette, FrancE; [2]Laboratoire De Chimie Physique, Orsay, France; [3]CEA-DAM, Bruyères-le-Châtel, France; [4]CNR-Lab. Naz. TAS-INFM, Basovizza, ITALY; [5]Sincrotone Trieste, Basovizza, Italy; [6]LIXAM-CNRS, Orsay, France; [7]Lab. Planétologie, Grenoble, France*

WP 093 **Laser-Induced Dissociation of Peptide Ions using Shaped Femtosecond Laser Pulses**; Christine L. Kalcic; Tissa C. Gunaratne; Nelson Winkler; Gavin E. Reid; A. Daniel Jones; Marcos Dantus; *Michigan State University, East Lansing, MI*

WP 094 **ESI Tandem Mass Spectrometry Investigation of Gas-Phase Phosphoric Acid Clusters**; Ryan Dain; Vy Pham; Michael J. Van Stipdonk; *Wichita State University, Wichita, KS*

WP 095 **A Study on Oxygenated Uranium and Cerium Clusters and Their Reactivity in the Gas Phase Followed by FTICRMS;** Frédéric Aubriet[1]; Anita K. Gianotto [2]; Gary Groenewold[2]; Jean Jacques Gaumet[1]; *[1]LSMCL, Metz University, Metz, FRANCE; [2]INEEL, Idaho Falls, ID*

WP 096 **Radical Directed Dissociation: A New Paradigm in Protein Identification**; Ryan R. Julian; Tony Ly; *University of California, Riverside, Riverside, CA*

WEDNESDAY POSTERS

WP 097 **Unimolecular Decay of Negatively Charged, Deoxynucleosides and Nucleosides in the Gas Phase Studied by Matrix Assisted Laser Desorption/Ionization;** Helga Dögg Flosadóttir; Benedikt Ómarsson; Oddur Ingolfsson; *University of Iceland, Reykjavik, Iceland*

WP 098 **Revealing the Mechanism Behind Selective Dissociation at Tyrosine Residues Following Photodissociative Generation of Peptide Radical Cations**; Tony Ly; Ryan R. Julian; *University of California, Riverside, Riverside, CA*

WP 099 **Protonated Carbamic Acid in the Gas Phase. The Aminodihydroxyethyl Radical Studied by Neutralization-Reionization Mass Spectrometry and ab initio/RRKM Calculations;** Joshua A Gregersen[1]; Changtong Hao[2]; Frantisek Turecek[1]; *[1]University of Washington, Seattle, WA; [2]York University, Toronto, ON*

WP 100 **Microsolvation of Co2+ by acetonitrile and water: Photodissociation dynamics of Co2+(CH3CN)n(H2O)m**; Manori Gunawardhana; *University of Massachusetts Amherst, Amherst, MA*

WP 101 **Isomeric Distinction Based on Regiospecific Collision-Induced Dissociations in Tandem Mass Spectrometry**; Aura Tintaru [1]; Yohann Benchabane[2]; Gérard Boyer[2]; Stéphane Humbel[2]; Laurence Charles[1]; *[1]Université de Provence, Marseille, France; [2]Université Paul Cézanne, Marseille, France*

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WP 103 **General Recognition of Isomeric α, β or γ-mono-Substituted Pyridines by Mass Spectrometry**; Yuri E Corilo[1]; Marcos N Eberlin[2]; *[1]State University of Campinas, Campinas, Brazil; [2]Thomson Lab Unicamp, Campinas, Sp, Brazil*

WP 104 **Intermolecular Hydrogen Bonding in Noncovalent Complexes of Cavitands Studied by Gas-Phase Ion–Molecule Reactions and Theoretical Calculations**; Elina Kalenius[1]; Raisa Neitola[1]; Enrico Dalcanale[2]; Pirjo Vainiotalo[1]; *[1]University of Joensuu, Joensuu, Finland; [2]University of Parma, Parma, Italy*

WP 105 **Evidence for the Existence of an α-Effect in the Gas Phase Reactions of the Hydroperoxide Anion with Dimethyl Methylphosphonate**; Andrew M. McAnoy[1]; Martin R.L. Paine[2]; Stephen J Blanksby[2]; *[1]Defence Science and Technology Organisation, Melbourne, Australia; [2]University of Wollongong, Wollongong, Nsw, Australia*

WP 106 **Elimination Reactions of Microsolvated Fluoride: A Comprehensive Study of Different Solvents**; Nicole Eyet; Stephanie M. Villano; Veronica M. Bierbaum; *University of Colorado, Boulder, CO*

WP 107 **Reactivity and Thermochemistry of a Series of α,n-Dehydropicolines and Picoline N-Oxides**; Paul G. Wenthold; Bonnie Schafman-Janowiak; *Purdue University, West Lafayette, In*

WP 108 **Modeling Oxidative Damage of Peptides in the Gas Phase**; Christopher K Barlow[1]; Satish Chand[2]; Christopher J. Easton[2]; Richard A. J. O'Hair[1]; *[1]University of Melbourne, Melbourne, Australia; [2]Australian National University, Canberra, ACT, Australia*

WP 109 **Directly Observing the Gas Phase Reactions of Carbon-Centred Radicals using Distonic Anions**; Benjamin B Kirk; David G Harman; Stephen J Blanksby; *University of Wollongong, Wollongong, Australia*

WP 110 **A Novel σ,σ,σ–Triradical Cation: The 3,4,5–Tridehydropyridinium Ion**; Bartlomiej J. Jankiewicz; Jennifer N. Reece; Nelson R. Vinueza; John J. Nash; Hilkka I. Kenttämaa; *Purdue University, West Lafayette, IN*

WP 111 **Gas-Phase Charge Inversion of Drug and Drug Metabolites Ions via Ion/Ion Reactions**; Kerry M. Hassell[1]; Yves LeBlanc[2]; Scott A. McLuckey[1]; *[1]Purdue University, West Lafayette, IN; [2]MDS Sciex, Concord, Canada*

WP 112 **Gas Phase Hydrogen/Deuterium Exchange of Peptides: Effect of Intramolecular Interactions**; Young Lee; Laura Simpson; Elaine M. Marzluff; *Grinnell College, Grinnell , IA*

WP 113 **Fragmentation of Nanoparticles under keV Cluster Bombardment**; Sidhartharaja Rajagopalachary; Stanislav Verkhoturov; Emile A. Schweikert; *Texas A&M University, College Station, TX*

WP 114 **Spatial Distribution and Identification of Terminal Negative Ions in Inhomogeneous Electric Field Established by Corona Needle**; Kanako Sekimoto; Mitsuo Takayama; *Yokohama City University, Yokohama, Japan*

WP 115 **Gas Phase Hydrogen/Deuterium Exchange of Peptides Containing Acidic Sidechains**; Elaine M. Marzluff; Ning-Shiuan Lee; Spring Knapp; *Grinnell College, Grinnell, IA*

WP 116 **Gas-Phase H/D Exchange of Lysine-Containing Peptides: Impact of Conformational Changes and Intramolecular Interactions**; Byoung Joon Ko[1]; Jennifer Brodbelt[2]; *[1]UT-Austin, Austin, TX; [2]The University of Texas, Austin, TX*

WP 117 **Investigation of Deprotonation Reactions on Peptides, Proteins and DNA at Atmospheric Pressure by ESSI-MS**; David Touboul; Matthias Conradin Jecklin; Renato Zenobi; *ETH Zurich, Zurich, Switzerland*

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WP 119 **Analysis of Polybrominated Diphenyl Ethers (PBDEs) in GC Triple Linear Quadrupole Mass Spectrometer**; Byungchul (BC) Cha; Nigel Gore; Dipankar Ghosh; *Thermo Fisher Scientific, San Jose, CA*

WP 120 **Occurrence of Pharmaceuticals and Personal Care Products (PPCPs) from Environmental Aquesous Samples by LC/ESI-MS-MS**; Seung-Woon Myung; *Kyonggi University, Suwon-Si, South Korea*

WP 121 **Profiling Analysis of the Degradation Products of Alkylphenol Polyethoxylates by LC-MS using an Acclaim Surfactant Column with Mass Spectrometric Detection**; Jinyuan Wang; Stacy Henday; Xiaodong Liu; William C. Schnute; *Dionex Corporation, Sunnyvale, CA*

WP 122 **Analysis of Melamine and Related Compounds using MALDI/TOF**; James A. Campbell; Catherine E Petersen; David Wunschel; *Pacific Northwest National Laboratory, Richland, WA*

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WP 123 **Investigation of LC-MS-MS for Analysis of Current-Use Flame Retardants**; Gordia MacInnis[1]; Gregg Tomy[2]; Gilles Arsenault[3]; Eric Reiner[4]; Frank Dorman[5]; Chris Marvin[1]; *[1]Environment Canada, Burlington ON, Canada; [2]Department of Fisheries & Oceans, Winnipeg MB, Canada; [3]Wellington Laboratories Inc., Guelph ON, Canada; [4]Ontario Ministry of the Environment, Toronto ON, Canada; [5]Restek Corporation, Bellefonte PA, USA*

WP 124 **Comparison of Turbulent-Flow Chromatography and Conventional Reversed-Phase Liquid Chromatography for the On-Line Preconcentration of Anti-Infectives in Wastewaters**; Pedro A. Segura[1]; Christian Gagnon[2]; Sébastien Sauvé[1]; *[1]Université de Montréal, Montréal, QC; [2]Environnement Canada, Montréal, QC*

WP 125 **Determination of Pharmaceuticals and Personal-Care Products using Polar Organic Chemical Integrative Samplers and Liquid Chromatography Tandem Mass Spectrometry;** Stephen L. Werner[1]; Edward T. Furlong[2]; David A. Alvarez[2]; *[1]US. Geological Survey, National Water Quality Labo, Lakewood, CO; [2]U.s. Geological Survey, Denver, CO*

WP 126 **Endocrine Disrupters Adsorbed on Macro and Micro Plastic Debris in the Ocean;** Lorena M. Rios[1]; Patrick R. Jones[1]; O. David Sparkman[1]; Charles Moore[2]; *[1]University of the Pacific, Stockton, CA; [2]Algalita Marine Research Foundation, Long Beach, CA*

WP 127 **Characterization of EE2 Metabolite in Bioreactors with Pure Cultures of *Nitrosomonas europaea* and in Activated Sludge using LC/ITMS**; Jolanta Skotnicka-Pitak[1]; Jolanta Skotnicka-Pitak[5]; Diana S. Aga[1]; Wendell O. Khunjar[2]; Nancy G. Love[3]; Taewoo Yi[4]; Willie F. Harper Jr. [4]; *[1]University at Buffalo, Buffalo, NY; [2]Virginia Tech, Blacksburg, VA; [3]University of Michigan, Ann Arbor, MI; [4]University of Pittsburgh, Pittsburgh, PA; [5]Cracow University of Technology, Krakow, Poland*

WP 128 **Automated Online SPE-LC-MS-MS Analysis of Pharmaceuticals with Variable Hydrophobicities in Municipal Wastewaters**; Araceli Garcia Ac[1]; Sebastien Sauve[1]; Christian Gagnon[2]; *[1]Université de Montréal, Montreal, Canada; [2]Ecosystem Research Division, Environment Canada, Montreal, Quebec, Canada*

WP 129 **Simultaneous Determination of Pharmaceuticals in Water by Liquid Chromatography Tandem Mass Spectrometry**; Hye-seoung Shin[1]; Ji Hye Gil[1]; Su-won Lee[2]; *[1]Hankyong National University, Ansung, South Korea; [2]The Office of Waterworks, Seoul, South Korea*

WP 130 **LC-MS Characterization of Golden Alga (Prymnesin parvum) Toxin in Natural Waters**; Pamela Hamlett; *TX Parks & Wildlife Dept., San Marcos, TX*

WP 131 **Activity-directed Analytical Tools Based on Hormone Receptor-Affinity Extraction for Isolating EDCs from complex Mixtures Prior to Detection by LC-MS-MS**; Lauren Shaw; Patrick Lee Ferguson; *University of South Carolina, Columbia, SC*

WP 132 **Combination of NanoESI-QqTOF-MS-MS and LC-MS-MS for Identification of Photolytic Degradation Products of Antibiotic Sulfamethoxazole in Aqueous Solutions**; Despina TsipI[1]; Panagiota Mpourou[1]; Spiros Antoniou[1]; Eleni Botitsi[1]; Spiros D. Garbis[2]; Silvia Lacorte[3]; *[1]General Chemical State Laboratory, Athens, Greece; [2]Academy of Athens - Biomedical Foundation, Athens, Greece; [3]CID-CSIC, Barcelona, Spain*

WP 133 **Online SPE-LC-APPI-MS-MS for the Quantification of Estrogenic Endocrine Disruptors in Water**; Liza Viglino[1]; Khadija Aboulfadl[1]; Michèle Prévost[2]; Sébastien Sauvé[1]; *[1]Université de Montreal, Montreal, CANADA; [2]École Polytechnique de Montréal, Montréal, Canada*

WP 134 **Novel Determination Method of Anti-Infectives and Estrogenic Endrocrine Disruptors in Wastewater and Drinking Water using LDTD-APCI-MS-MS**; Paul Fayad[1]; Pedro A. Segura[1]; Pierre Picard[2]; Michèle Prévost[3]; Christian Gagnon[4]; Sébastien Sauvé[1]; *[1]Université de Montréal, Montréal, QC; [2]Phytronix Technologies, Inc., Quebec, QC; [3]École Polytechnique de Montréal, Montréal, QC; [4]Environnement Canada, Montréal, QC*

WP 135 **Mass Spectrometric Analysis of Human Urine for 22 Phthalate Metabolites by using a Novel Reversed HPLC Gradient;** Manori J Silva; Ella Samandar; John Reidy; James Preau; Needham Larry; Antonia Calafat; *Centers for Disease Control and Prevention, Atlanta, GA*

WP 136 **Trace Analysis of Polar Pharmaceuticals in Wastewater after Treatment with Membrane Bioreactor by LC-MS**; Mary Dawn Celiz[1]; Sandra Perez[2]; Damia Barcelo[2]; Diana Aga[1]; *[1]The State University of New York at Buffalo, Buffalo, NY; [2]Department of Environmental Chemistry, IIQAB-CSIC, Barcelona, Spain*

WP 137 **Determination of Bisphenol A, Selected Alkylphenols and Related Ethoxylates in Water Samples using Solid Phase Extraction and GC-EI-MSMS**; Ivana Kosarac; Brian Stewart; Cariton Kubwabo; *Health Canada, Ottawa, ON, Canada*

WP 138 **Comparison of ESI,APPI,APCI and APCI/APPI for Determining Estrogenic Chemicals in Water by UPLC-MS-MS with Chemical Derivatizations**; Guang-Wen Lien; Chia-Yang Chen; *National Taiwan University, Taipei, TAIWAN*

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WP 139 **Elestrospray Ionization Mass Spectrometry Characterization of Sorption of Oilsands Naphthenic Acids to Engineered Polymers**; John Headley[1]; Kerry M. Peru[2]; Mohamed Mohamed[3]; Lee Wilson[3]; *[1]Environment Canada, WSTD, Saskatoon, CANADA; [2]Environment Canada, Saskatoon, SK; [3]Department of Chemistry, 110 Science Place, Saskatoon, Sk, Canada*

WP 140 **Can Naphthenic Acids Be used as Molecular Monitors of Crude Oil Biodegradation in the Environment? A Field Investigation;** Christine A. Hughey[1]; Carina S. Minardi[1]; Mmilili M. Mapolelo[2]; Ryan P. Rodgers[3]; Alan G. Marshall[3]; Dan Ruderman[4]; *[1]Chapman University, Orange, CA; [2]Florida State Univ, Dept of Chemistry, Tallahassee, FL; [3]Ion Cyclotron Resonance Prog, Tallahassee, FL; [4]Applied Proteomics, Inc., Glendale, CA*

WP 141 **Analyses of Kamchatka Crude Oil by FTICR Mass Spectrometry**; Alexey Kononikhin[1]; Gleb Vladimirov[1]; Erast Kunenkov[2]; Igor Popov[1]; Irina Perminova[2]; Andrey Garmash[2]; Gennadij Karpov[3]; Sergey Varfolomeev[1]; Eugene Nikolaev[4]; *[1]Institute for Biochemical Physics RAS, Moscow, Russia; [2]Lomonosov Moscow State University, Moscow, Russia; [3]Institute of Volcanology and Seismology RAS, Petropavlovsk-Kamchatsky, Russia; [4]The Institute For Energy Problems of Chemical Phys, Moscow, Russian Federation*

WP 142 **Classification and Differentiation of Crude oil by Fourier Transform ion Cyclotron Resonance Mass Spectrometry using Electrospray Ionization**; Matthias Witt[1]; Jens Fuchser[1]; Victor Fursey [2]; *[1]Bruker Daltonik GmbH, Bremen, Germany; [2]Bruker Daltonics, Billerica, MA*

WP 143 **Evolved Gas Analysis in Thermogravimetry by a Novel Photo-Ionisation Mass Spectrometer: Organic Signatures of Polymer Pyrolysis and Crude Oil Distillation**; Ralf Zimmermann [1]; Mohammed Saraji-Bozorgzad[2]; Thorsten Streibel[2]; Martin Sklorz[2]; Robert Geißler[2]; *[1]University of Augsburg, Augsburg, Germany; [2]Helmholtz Zentrum München, Oberschleissheim, Germany*

WP 144 **Characterization of B100 Biodiesel and Biodiesel Precipitants by GCMS and LC-MS**; Ryan C Shea[1]; Rick E Pauls[1]; Phyllis S Munowitz[1]; Michael Foster[2]; *[1]BP Global Aromatics Technology, Naperville, IL; [2]BP Global Fuels Technology, Naperville, IL*

WP 145 **Petroleum Molecular Speciation Comparisons by ASAP, APPI, and APCI Fourier Transform Ion Cyclotron Resonance Mass Spectrometry**; Jeremiah M. Purcell[1]; Ryan P. Rodgers[1]; Christopher L. Hendrickson[1]; Alan G. Marshall[1]; Charles N. Mcewen[2]; Barbara S. Larsen[2]; *[1]National High Magnetic Field Laboratory, Tallahassee, FL 32310; [2]DuPont Corporate Center for Analytical Sciences, Wilmington, DE 19880*

WP 146 **Electrospray Ionization FT-ICR Mass Spectrometry of "ARN" Naphthenic acids in Crude Oil: Extraction and Quantification;** Mmilili Myles Mapolelo[1]; Ryan P. Rodgers[2]; Andrew T Yen[3]; Sam Asomaning[3]; Justin Debord[3]; Alan G. Marshall[4]; *[1]Florida State Univ, Dept of Chemistry, Tallahassee, FL; [2]Nat'l High Magnetic Field Lab, Tallahassee, FL; [3]BakerPetrolite, Sugarland, TX; [4]Ion Cyclotron Resonance Prog, Tallahassee, FL*

WP 147 **Biodiesel and Diesel Fuel Analysis with the Supersonic GC-MS**; Aviv Amirav; Marina Poliak; Alexander Gordin; Alexander B. Fialkov; *Tel-Aviv University, Tel-Aviv, Israel*

WP 148 **Effect of Source Rock Type and Maturity on Polar Chemical Composition Derived from FT-ICR Mass Spectrometry**; G. Eric Michael[2]; Ryan P. Rodgers[3]; Alan G. Marshall[3]; Donald F. Smith[1]; *[1]Fom Inst. Atomic/Molecular Physics, Amsterdam, The Netherlands; [2]ConocoPhillips, Houston, TX; [3]National High Magnetic Field Laboratory/FSU, Tallahassee, FL*

WP 149 **Hydrocarbon Type Analysis of Individual Fractions Depending on the Boiling Range of Lube Oil by GC-MSD**; Myoung-Han No; Eunkyoung Kim; *Skenergy Institute Of Technology, Daejeon, South Korea*

WP 150 **Characterization of Asphaltene Emulsion Interfacial Material by Ultrahigh Resolution FT-ICR Mass Spectrometry**; Brandie M. Ehrmann[1]; Priyanka Juyal[2]; Ryan P. Rodgers[2]; Alan G. Marshall[3]; *[1]National High Magnetic Field Laboratory/ FSU, Tallahassee, FL; [2]National High Magnetic Field Laboratory, Tallahassee, FL; [3]Ion Cyclotron Resonance Prog, Tallahassee, FL*

WP 151 **Biodiesel Typification and Quality Control by Direct Infusion Electrospray Ionization Mass Spectrometry Fingerprinting;** Sérgio Adriano Saraiva; Marcos N Eberlin; Rodrigo R. Catharino; Humberto M. Milagre; *ThoMSon Lab Unicamp, Campinas, SP, Brazil*

WP 152 **Analysis of Petrochemicals in Seafood after Oil Spills using Electronic Nose and High-Speed Gas Chromatography-Mass Spectrometry;** F. Aladar Bencsath[1]; Paul P. Eilers[2]; *[1]FDA, Gulf Coast Seafood Lab, Dauphin Island, AL; [2]Prairie Dog Pals, Albuquerque, New Mexico*

WP 153 **ESI FT-ICR MS in the Speciation of Recalcitrant Sulfur Aromatic Compounds in Desulfurized Vacuum Gas Oils**; Saroj Panda [1]; Jan T. Andersson[2]; Wolfgang Schrader[1]; *[1]Max-Planck Inst Coal Res., Mülheim / Ruhr, Germany; [2]Westfälische Wilhelms-Universität Münster, Münster, Germany*

WP 154 **Characterization of an Oily Mixture of Reactive Cyclo-[Mo(CO)4(Sb4EtnPr(6-n))] Complexes by LIFDI-MS**; H Bernhard Linden; *Linden CMS, Leeste, Germany*

WP 155 **Rapid Hydrocarbon Analysis using a Miniature Rectilinear Ion Trap Mass Spectrometer**; Ewa Sokol; R. Graham Cooks; *Purdue University, West Lafayette, IN*

WP 156 **Characterization of Naphthenic Acids from Athabasca Oil Sands for Environmental Analysis using Fourier Transform Ion Cyclotron Resonance Mass Spectrometry**; Mark P. Barrow[1]; Kerry M. Peru[2]; John V. Headley[2]; Peter J. Derrick[3]; *[1]University of Warwick, Coventry, UK; [2]Environment Canada, Saskatoon, Canada; [3]Inst of Fundamental Sciences, Palmerston North, New Zealand*

WP 157 **First Generation Biofuels: Simple Mixtures - Complex Analytics**; G. John Langley[1]; Julie Herniman[1]; Martin Gower[1]; Steven Lamond[1]; Pearl McMahon[1]; Tom Lynch[2]; Hugh Preston[2]; *[1]University of Southampton, Southampton, UK; [2]BP Castrol Global Lubricants Technology, Pangbourne, UK*

WP 158 **Multidimensional On-Line HPLCxGC for Characterization of Hydrocarbon Fractions in Petrochemical Samples**; Nieves Sarrión[1]; Joseph Gibert [2]; J. Antonio Muñoz[1]; Ariadna Galve[3]; *[1]Konik-Tech, S.A., Sant Cugat del Vallés, SPAIN; [2]Konik Instruments, Inc., Miami, FL; [3]IKAI, Sant Cugat Del Vallès, Spain*

WP 159 **Applications of Atmospheric Pressure Photoionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry for Analysis of Asphaltenes and Heavy Crude Oil**; Amy Mckenna; Jeremiah M. Purcell; Tanner M. Schaub; Ryan P. Rodgers; Alan G. Marshall; *National High Magnetic Field Laboratory, Tallahassee, FL*

WP 160 **Electrospray Ionization FT-ICR Mass Spectrometric Mapping of Petroleum Compound Classes by Simple Silver Adduction**; Priyanka Juyal; Ryan P. Rodgers; Alan G Marshall; *National High Magnetic Field Laboratory/ FSU, Tallahassee, FL*

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WP 161 **Monitoring Tumor Progression in a Mouse Model of Malignant Pleural Effusion by MALDI IMS**; Joey C. Latham; Pierre Chaurand; Kirk B. Lane; Taylor Sherrill; Richard M. Caprioli; *Vanderbilt Univ Sch of Med, Nashville, TN*

WP 162 **Protein Markers of Survival in Metastatic Melanoma by Histology Directed MALDI MS**; William Hardesty[1]; Mark C. Kelley[1]; Deming Mi[1]; Robert L. Low[2]; Richard M. Caprioli[3]; *[1]Vanderbilt University, Nashville, TN; [2]UCDHSC, Aurora, CO; [3]Vanderbilt Univ Sch of Med, Nashville, TN*

WP 163 **Efficient Strategies for Identification of Proteins in MALDI Tissue Images**; Barbara Leinweber[1]; George Tsaprailis[1]; Linda A. Breci[2]; Cynthia L. David[1]; Yelena Feinstein[1]; Serrine S. Lau[1]; *[1]College of Pharmacy, University of Arizona, Tucson, AZ; [2]College of Science, University of Arizona, Tucson, AZ*

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WP 164 **Exploring the Assembly of an Organism using MALDI Imaging: A Systems Approach to Understanding Embryonic Development**; Maxence Wisztorski[1]; Jocelyne Bruand[2]; Julien Franck[1]; David Bonnel[1]; Vineet Bafna[2]; Eduardo Macagno[2]; Michel Salzet[1]; Isabelle Fournier[1]; *[1]MALDI Imaging Team, University of Lille, Villeneuve d'Ascq, FRANCE; [2]University of California, La Jolla, San Diego, CA*

WP 165 **Imaging Mass Spectrometry Clocking in with Proteomics: On-Tissue MS-MS for Proteins Identification;** Luke MacAleese; Erika R. Amstalden Van Hove; Jonathan Stauber; Ron M.A. Heeren; *FOM Inst. Atomic/Molecular Physics, Amsterdam, NETHERLANDS*

WP 166 **Measuring HIV Protease Inhibitors in Cytocentrifuged Leukocyte Sub-Types using Mass Spectrometry Imaging Techniques;** Lennard Dekker; Jeroen van Kampen; Peter Burgers; Marleen Reedijk; Rob Gruters; Ab Osterhaus; Theo Luider; *Erasmus Medical Center, Rotterdam, Netherlands*

WP 167 **MALDI-MSI of Prostate Tissues for Detection of Cancer and Micrometastatic Disease;** Lisa H. Cazares; Raymond S. Lance; Savvas E. Mendrinos; Michael B. Williams; MaryAnn Clements; Richard R. Drake; O. John Semmes; *EVMS Norfolk, VA, Norfolk, VA*

WP 168 **MADLI MSI Analysis of Rat Hearts from Animals Treated with Isoprenaline**; Alan BarneS[1]; Jatin Burniston[2]; *[1]Shimadzu Biotech, Manchester, UK; [2]Liverpool John Moore's University, Liverpool, UK*

WP 169 **Visualisation and *in situ* Characterisation of Proteins in Adenocarcinoma tissue sections by Direct MALDI-Mass Spectrometry Imaging**; Marie-Claude Djidja[1]; Chris W. Sutton[2]; Paul M. Loadman[2]; Peter Scriven[3]; Marten F. Snel[4]; Emmanuelle Claude[4]; Malcolm R. Clench[1]; *[1]Sheffield Hallam Uni, UK, Sheffield, UK; [2]Institute of Cancer Therapeutics, Bradford, UK; [3]University of Sheffield, Sheffield, UK; [4]Waters Corporation, Manchester, UK*

WP 170 **Brain MS Imaging after Ischemic Stroke in Mice – Insight for Brain Injury by Abnormal Proteolysis**; Zezong Gu[1]; Fanjun Meng[1]; Wei Wu[2]; Joseph P. Fox[3]; Jiankun Cui[2]; Gongyi Shi[3]; *[1]Univ. Missouri-Columbia School of Medicine, Columbia, MO; [2]Burnham Institute for Medical Research, La Jolla, CA; [3]Bruker Daltonics Inc., Freemont, CA*

WP 171 **From Lipids to Proteins in one Single Tissue**; Erika R. Amstalden Van Hove [1]; Ivo Klinkert[1]; Tiffany Greenwood[2]; Kristine Glunde[2]; Ron M.a. Heeren[1]; *[1]Fom Inst. Atomic/molecular Physics, Amsterdam, NetherlandS; [2]Johns Hopkins University School of Medicine, Baltimore, MD*

WP 172 **What Lies Beneath: In Situ Assessment of Endogenous Enzyme Activity using Imaging Mass Spectrometry**; Kristen Herring[1]; Kristin E. Burnum[1]; Richard M. Caprioli[2]; *[1]Vanderbilt University, Nashville, TN; [2]Vanderbilt Univ Sch of Med, Nashville, TN*

WP 173 **MALDI Tissue Imaging of the Chick Heart**; Angus C. GreY; Jarren Section; Ricardo A. Moreno-Rodriguez; Edward L. Krug; Kevin L. Schey; *Medical University of SC, Charleston, SC*

WP 174 **Mining Tissue Microarrays of Disease: Detection of Molecular Features using MALDI Imaging Mass Spectrometry**; Reid Groseclose[2]; Pierre P. Massion[1]; Richard M. Caprioli[2]; *[1]Vanderbilt University Medical Center, Nashville, TN; [2]Vanderbilt Univ Sch of Med, Nashville, TN*

WP 175 **Correlation of a Tyrosine Kinase Inhibitor Distribution with Proteome Response in a Glioma Mouse Model by MALDI Imaging Mass Spectrometry**; Sara L. Frappier[1]; Michael L. Edgeworth[1]; Richard M. Caprioli[2]; *[1]Vanderbilt University, Nashville, TN; [2]Vanderbilt Univ Sch of Med, Nashville, TN*

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WP 176 **Enhanced Identification of Biotin-Derivatized Peptides**; Peter G. Slade[1]; Erin S. D. Bolstad[2]; Michelle Williams[1]; Ioannis Papayannopoulos[1]; John S. Wishnok[1]; Steven R. Tannenbaum[1]; *[1]MIT, Cambridge, MA; [2]University of Connecticut, Storrs*

WP 177 **IPEP: A Computational Tool for Designing Proteomics Experiments around PTM Motifs**; Victoria Izumi[1]; Dihui Lu[2]; Eric Haura[2]; David Fenstermacher[2]; Steven Eschrich[2]; John Koomen[2]; *[1]Moffitt Cancer Center & Research Institute, Tampa, FL; [2]H. Lee Moffitt Cancer Center, Tampa, FL*

WP 178 **Accurate Extraction of MS-MS Scans – Database Search Enhancement**; Ilan Vidavsky; Michael L. Gross; *Washington University, St Louis, MO*

WP 179 **Swift: Automated Submission to Five MS-MS Search Engines with Unified Parameters**; Christopher Mason; Roman Ženka; Eric Winter; David Lentz; H. Robert Bergen III; *Mayo Proteomics Research Center, Rochester, MN*

WP 180 **PRIME: Proteome Research Information Management Environment For High-Throughput Proteomics Laboratories**; Panagiotis G Papoulias[1]; David Lentz[2]; Philip Andrews[3]; *[1]National Resource For Proteomics And Pathways, Ann Arbor , MI; [2]Mayo Clinic, Rochester, MN; [3]University of Michigan, Ann Arbor, MI*

WP 181 **Adaptable Enterprise Pipeline for the Computational ProteomicsAnalysis System (CPAS)**; Brendan Maclean[1]; Parag Mallick[2]; *[1]LabKey.com, Seattle, WA; [2]Cedars-Sinai, Los Angeles, CA*

WP 182 **New Methods in Peptide *de novo* Sequencing Software with Manual Intervention Feature for Tandem Mass Spectral Data**; Jingwen Yao[1]; Matthew J. Kelly[1]; Kiriko Kamiya[1]; Jennifer Broughton[1]; Shigeki Kajihara[2]; *[1]Shimadzu Research Lab. (Europe) Ltd., Manchester, UK; [2]Shimadzu Corporation, Kyoto, Japan*

WP 183 **Enhancing and Automating the Maximum Entropy Deconvolution of Protein Spectra Acquired on High-Resolution TOF Mass Spectrometers**; Keith Richarson[1]; John Skilling[2]; Jason Wildgoose[1]; Iain Campuzano[1]; Scott Berger[3]; Robert Bateman[1]; *[1]Waters Corporation, Manchester, UK; [2]Maximum Entropy Data Consultants Ltd, Kenmare, Ireland; [3]Waters Corporation, Milford, MA*

WP 184 **Software for the Automated Processing of Data from ^{15}N-Metabolic Labeling Proteomics and Accurate Mass Peptide Identification**; Li Jing; Jon Amster; *University of Georgia, Athens, GA*

WP 185 **HERMES Novel Aspect: Platform Independent Open Source Project for submitting Data Files to MASCOT;** John Philip[1]; Panagiotis G Papoulias[2]; Paul Tempst[1]; Philip Andrews[3]; *[1]Memorial Sloan-Kettering Cancer Center, New York, NY; [2]National Resource For Proteo, Ann Arbor, MI; [3]University of Michigan, Ann Arbor, MI*

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WP 186 **Exploring Benefits of High Mass Accuracy Tandem Spectra in Proteomics**; Tom Patterson[1]; Alexander R. Ivanov[2]; *[1]nScan, Medford, MA; [2]Harvard School of Public Hea, Boston, MA*

WP 187 **MS-Scout: a Tool for Assessing Proteomic Data Quality in LC-MS and LC-FAIMS-MS Experiments**; Jesse Canterbury; Michael Hoopmann; Michael J. Maccoss; *University of Washington, Seattle, WA*

WP 188 **B-Fabric - An Infrastructure for Integrated Management and Analysis of Proteomic and Transcriptomic Derived Data;** Bertran Gerrits; Christian panse; Can Tuerker; Dieter Joho; Simon Barkow; Ralph Schlapbach; *ETH / UZH Zurich, Zurich, Switzerland*

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WP 192 **Characterization of Linear and Branched Polyacrylates by Tandem Mass Spectrometry**; Kittisak Chaicharoen[1]; Michael J. Polce[2]; Anirudha Singh[1]; Coleen Pugh[1]; Chrys Wesdemiotis[1]; *[1]University of Akron, akron, OH; [2]Lubrizol Advanced Materials, Brecksville, OH*

WP 193 **Study of Cycling and Ring-Forming Reactions of Multiple Functional Chemicals During the APCI Ionization to Synthesize Novel Large Crown Chemicals**; Wenjie Cao; *CRYOVAC, Sealed Air Corp., Duncan, SC*

WP 194 **Characterization of Fatty Alcohol Ethoxylate n(2-23) EO by ESI-MS and APCI-MS**; Monica Cecilia Vargas Mamani[1]; Sergio Adriano Saraiva[1]; Heliara Nascimento[1]; Gilberto Silva[2]; Marcos N Eberlin[1]; *[1]Thomson Laboratory Mass Spectrometry, Campinas, Brazil; [2]Oxiteno Industria Comércio SA, Maua-SP, Brazil*

WP 195 **An Absolute Molecular Mass Distribution Standard: SRM 2881**; Charles M. Guttman; Kathleen M. Flynn; Anthony J. Kearsley; William E. Wallace; *National Institute of Standards & Technology, Gaithersburg, MD*

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WP 197 **LDI-FTMS Analysis of Thin Films Deposited on Silicon by Plasma Polymerization of Acetylene**; Sasa Miladinovic [1]; Valerie De Vriendt[2]; Stephane Lucas[2]; Charles L. Wilkins[1]; *[1]University of Arkansas, Fayetteville, AR; [2]University of Namur-FUNDP, Namur, Belgium*

WP 198 **Analysis of Poly(styrene-co-allyl alcohol) using MS and MS-MS Methods**; Bethany Subel; Chrys Wesdemiotis; *University of Akron, Akron, OH*

WP 199 **Molecular Identification of Nitro-Tyrosine Modification in Human Eosinophil Proteins by Proteolytic Affinity Extraction- Mass Spectrometry (PROFINEX)**; Petre AlinA[1]; Martina Ulrich[2]; Gerd Doering[2]; Michael Przybylski[1]; *[1]University of Konstanz, Konstanz, Germany; [2]Institut für Allgemeine Hygiene, Tuebingen, Germany*

WP 200 **MALDI Mass Spectrometry as a Novel Tool for Molecular Weight and Polydispersity Analysis on Low Molecular Weight Polyamino Acids**; Ettigounder Ponnusamy; Justin Wildsmith; *Sigma-Aldrich, St. Louis, MO*

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WP 202 **Matrix-Assisted Laser Desorption/Ionization Tandem Mass Spectra of Synthetic Polymers using the Low and the High-Energy Fragmentation**; Hiroki Nakajima[1]; Martin Resch[2]; Leren Wan[3]; Fan Xiang [4]; *[1]Shimadzu Corporation, Life Science Laboratory, Kyoto, JAPAN; [2]Shimadzu Europa Gmbh, Duisburg, Germany; [3]Shimadzu Beijing Office, Beijing, CHINA; [4]Shimadzu Biotech, Pleasanton, CA*

WP 203 **Ionizing Polymers with Protonated Amino Acids: New Fragmentation Pathways and Thermochemistry**; Abdulrahman Alhazmi; Paul Michael MayeR; *University of Ottawa, Ottawa, Canada*

WP 204 **Characterization of Polymers by MALDI TOF Mass Spectrometry for REACH Compliance. Does Different Matrix Have Any Influence on Mass Accuracy?**; Heliara Nascimento[1]; Sergio Saraiva[2]; Jerusa Simone Garcia[2]; Monica Vargas[2]; Marcos N Eberlin[2]; *[1]Thomson Mass Spectrometry Laboratory, Campinas, Brazil; [2]Thomson Lab Unicamp, Campinas, Sp, Brazil*

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WP 206 **Comprehensive Two-Dimensional Gas Chromatography/High-Resolution Time-of-flight Mass Spectrometry for Polymer Analysis Coupled with Pyrolyzer**; Junichi Osuga[1]; Masaaki Ubukata[1]; Kazutetsu Nojima[1]; Takatoshi Noguchi[2]; Hisae Miyamoto[2]; Kristie Hoyt[3]; Yasuyuki Shibata[4]; Yoshikatsu Takazawa[4]; *[1]JEOL Ltd., Akishima, JAPAN; [2]Nissan Chemical Industries, LTD., Funabashi, JAPAN; [3]JEOL USA, Inc., Boston, MA; [4]National Institute for Environmental Studies, Tsukuba, Japan*

WP 207 **Effect of the Cation Used in Electrospray Ionization of Living Polymers on the Release of End-Groups during Collision-Induced Dissociations**; Michaël Mazarin[1]; Marion Girod[1]; Trang Phan[1]; Stéphane Humbel[2]; Laurence Charles[1]; *[1]Universités Aix-Marseille, Marseille, France; [2]Université Paul Cézanne, Marseille, France*

WP 208 **MALDI-TOF MS of *N*-Substituted Fulleropyrrolidines**; Eun Su Park; Kathleen M. Flynn; Mickey C. Richardson; Gale A. Holmes; Charles M. Guttman; William E. Wallace; *National Institute of Standards & Technology, Gaithersburg, MD*

WP 209 **Mass Spectral Characterization of a Sorbitan Oleate Ethoxylate Surfactant**; Michael J. Polce[1]; Mark Szewc[2]; Giovanni A. Pallante[2]; Robert P. Lattimer[1]; *[1]Lubrizol Advanced Materials, Brecksville, OH; [2]Thermo Scientific, Brunswick, OH*

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WP 211 **Tandem Mass Spectrometry of Poly(Methacrylic Acid) Anions and Cations Produced by Electrospray Ionization**; Rémi Giordanengo[1]; Beatrice Allard-Breton[2]; Laurence Charles[1]; *[1]Universités Aix-Marseille, Marseille, France; [2]ARKEMA, Centre de Recherche Rhône Alpes, Pierre-Bénite, France*

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WP 218 **Optimization of MALDI-TOF-MS Sample Preparation for Synthetic Polymers via Nanoliter Deposition and Novel Matrix Formulations**; Julie Harmon[1]; Charles M. Guttman[2]; Drew Sauter[3]; Brent Hilker[1]; kevin clifford[1]; andrew d sauter III[3]; Kathleen Flynn[2]; *[1]University of South Florida, Tampa, FL; [2]Nist, Polymers Division, Gaithersburg, MD; [3]Nanoliter, Llc, Henderson, NV*

WP 219 **Sequencing of a Living Poly(Ethylene Oxide)/Polystyrene Block Copolymer by Tandem Mass Spectrometry**; Marion Girod; Trang N. T. Phan; Laurence Charles; *Universités Aix-Marseille, Marseille, France*

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WP 226 **Electron Capture Dissociation of Metal-Adducted N-Linked Oligosaccharides Released from Bovine Thyroid Stimulating Hormone**; Wen Zhou; Kristina Hakansson; *University of Michigan, Ann Arbor, MI*

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WP 228 **Fragmentation Mechanism of Negatively-Charged Lewis-Type Trisaccharides in the Gas Phase: Experimental and Theoretical Studies**; Hiroaki SuzukI[1]; Tohru Yamagaki[1]; Kazuo Tachibana[1]; Kazuhiko Fukui[2]; *[1]University of Tokyo, School of science, Tokyo, JAPAN; [2]CBRC, AIST, Tokyo, Japan*

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WP 231 **Structural Characterization of Pyridylaminated Oligosaccharides by High-Sensitive Capillary Electrophoresis-ESI-QIT-TOF Mass Spectrometry**; Emi Ito[1]; Kazuki Nakajima[1]; Akio Tominaga[2]; Hiroaki Waki[2]; Hiroto Itoi[2]; Kazuaki Kakehi[3]; Kozo Miseki[2]; Minoru Suzuki[1]; *[1]The Institute of Physical and Chemical Research, Saitama, Japan; [2]Shimadzu Corporation, Kyoto, Japan; [3]Kinki University, Osaka, Japan*

WP 232 **Structural Characterization of Sulfated Glycans from High Molecular Weight Salivary Mucins using Rapid, Robust Methods of Sample Preparation and Analysis**; Sarah Robinson[1]; Akraporn Prakobphol[1]; Simon Allen[1]; Nancy J. Phillips[2]; Birgit Schilling[3]; Bradford W. Gibson[3]; Susan J. Fisher[1]; Penelope M. Drake[1]; *[1]Department of Cell and Tissue Biology, UCSF, San Francisco, CA; [2]Department of Pharmaceutical Chemistry, UCSF, San Francisco, CA; [3]Buck Institute For Age Research, Novato, CA*

WP 233 **Structural Characterization of Carboxymethylcellulose by Gas Chromatography-Mass Spectrometry**; Huiming Wang; Darryl H. Samuels; Tuyen T. Nguyen; Patrick J. Cowan; *Hercules Incorporated, Wilmington, DE*

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WP 238 **Chemokine-Glycosaminoglycan Interactions: Composition, Orientation, and Specificity Studied by Mass Spectrometry**; Matthew Schenauer; Matthew D. Sweeney; Julie A. Leary; *UC Davis, Davis, CA*

WP 239 **Comparison of CID, ECD, and ETD in the Dissociation of Noncovalent Complexes;** Sucharita Dutta[1]; Shelley N Jackson[2]; Amina S. Woods[3]; *[1]Thermo Fisher, San Jose, CA; [2]Nida-irp, Nih, Baltimore, MD; [3]Nida Irp, Nih, Baltimore, MD*

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WP 241 **Investigating Conformational Changes of Protein-Nucleic Acid and Protein-Ligand-Nucleic Acid Complexes by Tandem Mass Spectrometry**; Kevin B. Turner; Daniele Fabris; *University of Maryland Baltimore County, Baltimore, MD*

WP 242 **The Binding Interface of LexA/RecA Investigated by Solution Phase H/D Exchange, Cross-linking and Mass Spectrometry**; Brittany R. Perkins; Guilong Cheng; Kim Giese; Vicki H. Wysocki; John W. Little; *University of Arizona, Tucson, AZ*

WP 243 **Insight into the Subunit Interactions of 20S Proteasome using Chemical Cross-Linking and MALDI Tandem Mass Spectrometry**; Guoqiang Chen; ZHILI LI; *Chinese Academy of Medical Sciences, Beijing, CHINA*

WP 244 **Genome Inspired G-quadruplex DNA Binding Ligands for Affinity MALDI-TOF Mass Spectrometry**; Junfeng Xiao; Linda McGown; *Rensselaer Polytechnic Institute, Troy, NY*

WP 245 **Probing Allosteric Regulation of the 20S Proteasome with Mass Spectroscopy;** Monika Tokmina-Lukaszewska; Lydia S. Endel; Srividya Madabhushi; Maria E. Gaczynska; Pawel A. Osmulski; *University of Texas HSC, San Antonio, TX*

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WP 247 **High-Mass MALDI ToF Mass Spectrometry and Chemical Cross-linking for the study of Intact Protein Complexes**; Alexis Nazabal; Benoit Plet; Ryan Wenzel; *CovalX, Zürich, Switzerland*

WP 248 **Analysis of Major Protein Complexes of Erythrocytes Directly from Cell Lysate Utilizing Capillary Electrophoresis Mass Spectrometry**; Mehdi Moini; An Nguyen; *University of Texas at Austin, Austin, TX*

WP 249 **Electron Transfer Dissociation of Protein-Protein Complexes in a Quadrupole Ion Trap Mass Spectrometer**; Srikanth Rapole[134]; Jonathan Wilson[2]; Mark Olbris[134]; Richard Vachet[134]; *[1]University of Massachusetts, Amherst, MA; [2]Bruker Daltonics, Inc.,, Billerica, MA; [3]University of Massachusetts, Amherst, MA; [4]University of Massachusetts, Amherst, MA*

WP 250 **Deconvoluting Heterogenous Macromolecular Assemblies**; Justin LP Benesch[1]; J Andrew Aquilina[2]; Carol V Robinson[1]; *[1]Univeristy of Cambridge, Cambridge, UK; [2]University of Wollongong, Wollongong, Australia*

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WP 252 **Determination of Ligand-Induced Changes in DNA Conformations by Chemical Probes and Tandem Mass Spectrometry**; Carol E. Parr; Jennifer Brodbelt; *The University of Texas, Austin, TX*

WP 253 **Analysis of post-Transcriptionally Modified RNA in Heat Shocked Bacteria using LC-MS**; Susan Russell; Patrick A. Limbach; *University of Cincinnati, Cincinnati, OH*

WP 254 **Using ^{13}C-Enriched dGTP for Unambiguous Base Composition Determination from Accurate and Precise Mass Measurement with an ESI-TOF Mass Spectrometer**; Kristin A. Sannes-Lowery; Amy Schink; Thomas A. Hall; Yun Jiang; Steven A. Hofstadler; *Ibis Biosciences, Inc., Carlsbad, CA*

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WP 257 **The Optimal Properties of Cross-Linked RNA:Protein for Electron Capture Dissociation**; Kady Krivos; Larry Sallans; Patrick A. Limbach; *University of Cincinnati, Cincinnati, OH*

WP 258 **Green Tea Catechins Bound to DNA and RNA Observed by using Cold Spray Ionization Mass Spectrometry**; Kentaro Yamaguchi[1]; Takashi Kuzuhara[1]; Yoshihisa Sei[2]; Hirota Fujiki[1]; Mayumi Shibuta[1]; Masasmi Suganuma[3]; Natsuko Yamashita[1]; *[1]Tokushima Bunri University, Sanuki-city, Kagawa, Japan; [2]Tokushima Bunri Univercity, Sanuki-city, Japan; [3]Saitama Cancer Center, Kitaadachi-gun, Saitama, Japan*

WP 259 **Fragmentation Pathways of PNAs and Chemically Modified RNAs in Gas-Phase Ion-Electron Reactions and Vibrational Activation**; Hangtian Song; Jiong Yang; Kristina Hakansson; *University of Michigan, Ann Arbor, MI*

WP 260 **Characterization of Degradation Pathways of Modified Therapeutic Oligonucleotides using Mass Sequencing via UPLC-MS**; Anthony Leone; Peter Yehl; Ann O'brien; *Merck Co Inc, West Point , PA*

WP 261 **Identification of Possible rRNA Modifications Resulting in Antibiotic Resistance**; Rebecca Rohlfs; Patrick A. Limbach; *University of Cincinnati, Cincinnati, OH*

WP 262 **Novel G-Quadruplex Higher Order Assemblies Revealed by Electrospray Ionization Mass Spectrometry;** Nicolas Smargiasso[1]; Frederic Rosu[1]; Erin Baker[2]; Michael T. Bowers[3]; Pierre Colson[1]; Edwin De Pauw[1]; Valerie Gabelica[1]; *[1]University of Liege, Liege, Belgium; [2]Pnnl, Richland, WA; [3]University of California, Santa Barbara, CA*

WP 263 **High Throughput Purification and Analysis of PCR-Generated Oligonucleotides on a Fully Automated ESI-TOF-Based Platform**; Jared Drader; Jose Gutierrez; Thomas A. Hall; Kristin A. Sannes-lowery; Jose Alcala; James C. Hannis; Amy Schink; Maria Tobar-Mosquera; Sheri Manalili; Lendall C. Cummins; David Moore; Ranga Sampath; Lawrence Blyn; David J. Ecker; Steven A. Hofstadler; *Ibis Biosciences, Inc., Carlsbad, CA*

WP 264 **Exploring the Formation Pathways of DNA G-Quadruplex Architectures**; Frederic Rosu[1]; Harmonie Poncelet[1]; Nicolas Smargiasso[1]; Pierre Colson[1]; Edwin De Pauw[2]; Valerie Gabelica[1]; *[1]University of Liege, Liege, BELGIUM; [2]Liege University, Liege, Belgium*

WP 265 **Discovery of A New Type of DNA Photoproduct Containing a mC<>A Dimer**; Dian Su; John-Stephen Taylor; Michael L. Gross; *Washington University, St Louis, MO*

WP 266 **RNA Mass Spectrometry: a Platform Technology for Non-Coding RNA Research**; Yuriko Sakaguchi; Hiroki Ueda; Takeo Suzuki; Takayuki Katoh; Takeshi Seguchi; Kenjyo Miyauchi; Tsutomu Suzuki; *The University of Tokyo, Tokyo, Japan*

WP 267 **Quantitative Analysis of DNA Interstrand Cross-Links and Mono-Adducts Formed in Human Cells Induced by Psoralens and UVA Irradiation**; Congfang Lai[1]; Huachuan Cao[3]; Hai Luo[2]; Yinsheng Wang[2]; *[1], Riverside, CA; [2]University of California, Riverside, CA; [3]University of California, Riverside, Riverside, CA*

WP 268 **LC-MS-MS for the Quantification of Cytosine Methylation in DNA**; Hongxia Wang; Yinsheng Wang; *Department of Chemistry, UC Riverside, Riverside, CA*

WP 269 **Top-Down Analysis of siRNA via Ion Trap Collision-Induced Dissociation**; Teng-Yi Huang; Jian Liu; Xiaorong Liang; Brittany Hodges; Scott A. Mcluckey; *Purdue University, West Lafayette, IN*

WP 270 **LC-MS-MS Quantification and *in-vitro* Replication Studies of Thymidine Glycol/8-Oxo-2'-Deoxyguanosine Tandem Lesions**; Yong Jiang; Yinsheng Wang; *University of California, Riverside, Riverside, CA*

WP 271 **Reactivity of Nitrogen Mustards towards Guanines Adjacent to Methylated Cytosines in Oligonucleotides**; Suncerae Smith; Jennifer Brodbelt; *The University of Texas, Austin, TX*

WP 272 **Decoy Oligonucleotides: Analysis and Use in Head and Neck Carcinogenesis;** Rita Casadonte [1]; Lisa Manier[1]; David Carbone[1]; Jennifer Grandis[2]; Richard M. Caprioli[1]; *[1]Vanderbilt University, Nashville, TN; [2]University of Pittsburgh School of Medicine, Pittsburgh , PA*

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WP 274 **Direct Analysis of Aqueous Samples Containing Explosives at Picogram Level by LC-MS**; Olivier Vigneau; Xavier Machuron-Mandard; *CEA, Arpajon Cedex, France*

WP 275 **Sensitive LC-MS-MS Method for the Determination of Diclofenac in Human EDTA Plasma**; Aimin Tan; Jun Li; Harshvardhan Patel; Jacky Lee; Saleh Hussain; François Vallée; *Anapharm Inc., Richmond Hill, Canada*

WP 276 **Simultaneous Evaluation by Mass Spectroscopy of Multiple Formulation Ingredients in Dissolution Studies**; Audrey Tousignant; Louis-Philippe Labranche; Daniel Abran; Alain Carrier; *Sandoz Canada Inc., Boucherville, Canada*

WP 277 **Simulation of Phase I and II Metabolism of Toremifene using On-Line Electrochemistry/Immobilized Enzymes/Liquid Chromatography/Mass Spectrometry**; Wiebke Lohmann; Uwe Karst; *University of Münster, Münster, Germany*

WP 278 **Determination of Vincristine and Vinblastine in C. Roseus Leaves by Liquid Chromatography Mass Spectrometry**; Qishan Lin; Jinghua Zhu; *University at Albany, Rensselaer, NY*

WP 279 **Cob(I)alamin as an Analytical Tool for identifying Sucralose by using LC-MS-MS**; Hitesh V Motwani[1]; Henrik Kylin[2]; Bernard Golding[3]; Margareta Törnqvist[1]; *[1]Stockholm University, Stockholm, Sweden; [2]Norwegian Institute for Air Research, Tromsø, Norway; [3]Newcastle University, Newcastle upon Tyne, UK*

WP 280 **A LC-MS-MS Method for Quantitative Determination of Topotecan [(S)-9-di-methylaminomethyl-10-hydroxy-camptothecin] in Human Plasma**; Claudia Meek[1]; Daniel Bowers[2]; Richard Leff[1]; *[1]Texas Tech University, Dallas, TX; [2]UT Southwestern Medical Center, Dallas, TX*

WP 281 **Fast Identification of Anthocyanins in Blueberries Comparing Reverse Phase and HILIC High Performance Liquid Chromatography Coupled with ESI-IT-TOF-MS Detection**; Jeremy S Barnes; Hien Nguyen; Kevin Schug; *University of Texas At Arlington, Arlington, TX*

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WP 282 **A Faster and More Environmentally Friendly Approach to Quantitating Amotosalen HCl in Human Plasma;** Kelly Balla[1]; Roy Bogseth[2]; Todd Wielgos[2]; *[1]Baxter Healthcare Corp., Round Lake, IL; [2]Baxter Healthcare, Round Lake, IL*

WP 283 **Utilizing the Electrospray Membrane Probe to Map Electrospray Signal Response in Gradient LC/ES/MS**; Thomas P. White; Craig M. Whitehouse; *Analytica of Branford, Inc., Branford, CT*

WP 284 **Establishing Regression Model of Calibration Curve in a LC-MS-MS Method**; Rong Yi; Dunmin Mao; *Can Test Ltd., Burnaby, Canada*

WP 285 **Comparison of Different Ionization Techniques (ESI, DART, APGD) for Coupling of Mass Spectrometry with Planar Chromatography (HPTLC-MS)**; Gertrud E. Morlock; *University of Hohenheim, Stuttgart, Germany*

WP 286 **Simultaneous Determination of Rosuvastatin and N-Desmethylrosuvastatin in Human Plasma using Negative Ion ESI-LC-MS-MS**; Linge Li; William R. Mylott; Bruce J. Hidy; Rand G. Jenkins; *PPD, Richmond, VA*

WP 287 **Role of LC Mobile Phase Additives in Mass Spectrometry Signal Responses in Pesticide Analysis**; yaorong qian; *US EPA, Ft. Meade, MD*

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WP 472 **Process Optimization for Magnetic Beads Purification of Glycoproteins**; Ulrike Schweiger-Hufnagel[1]; Arndt Asperger[1]; Stefan Weise[3]; Katrin Sparbier[1]; Irina Kessler[1]; Markus Kostrzewa[1]; Jonathan Wilson[2]; Carsten Baessmann[1]; Peter Hufnagel[1]; *[1]Bruker Daltonik GmbH, Bremen, Germany; [2]Bruker Daltonics, Billerica, MA; [3]Protagen AG, Dortmund, Germany*

WP 473 **Structural Characterization of a Renal Biomarker NGAL**; Cheng Zhao; Carol Ramsay; Panfilo Ozaeta; Jeffrey Fishpaugh; Kevin Rupprecht; *Abbott Laboratories, Abbott Park, IL*

WP 474 **Dynamic Glycosylation of Human Milk Proteins**; John Froehlich; Eric D. Dodds; Richard Seipert; Mariana Barboza; Carlito Lebrilla; *University of California, Davis, California*

WP 475 **A Comprehensive Strategy to Characterize N-, O-Glycans and Glycoproteins**; HUI ZHOU[1]; Yunping Huang[2]; Mei Lin [2]; Michael Grace[2]; David Ashline[1]; Vernon N. Reinhold[1]; *[1]University of New Hampshire, Durham, NH; [2]Bristol-myers Squibb Company, Pennington, NJ*

WP 476 **The Ion Trap; Critical Component for a Comprehensive Evaluation of Metastatic Glycan Biomarkers**; Vernon N. Reinhold; Justin M Prien; David Ashline; Anthony Lapadula; *University of New Hampshire, Durham, NH*

WP 477 **Glycoprotein Discovery in a Gram-Negative Pathogenic Bacterium *Francisella tularensis* through Two-Dimensional Electrophoresis, Lectin Affinity, and Mass Spectrometry Approaches**; Lucie Balonova[1]; Lenka Hernychova[1]; Jiri Stulik[1]; Zuzana Bilkova[2]; William R. Alley[3]; Milos V. Novotny[3]; *[1]University of Defence, Hradec Kralove, Czech Republic; [2]University of Pardubice, Pardubice, Czech Republic; [3]Indiana University, Bloomington, IN*

WP 478 **Structural Analysis of the Outer-Core of *Yersinia enterocolitica* O:9 Lipopolysaccharide using Glycoengineering and Mass Spectrometry**; Messele A. Fentabil; Jeremmy Iwashkiw; Amirreza Faridmoayer; Mario F. Feldman; John S. Klassen; *University of Alberta, Edmonton, Canada*

WP 479 **Quantitation of the cardiac Glycoproteome using iTRAQ;** Jennifer E. Grant[1]; Amy D. Bradshaw[2]; John H. Schwacke[3]; Catalin F. Baicu[2]; Michael R. Zile[2]; Kevin L. Schey[1]; *[1]Dept. of Cell and Mol. Pharmacology, MUSC, Charleston, SC; [2]Cardiology Division, Dept. of Medicine, MUSC, Charleston, SC; [3]Dept. of Biostatistics and Bioinformatics, MUSC, Charleston, SC*

PROTEIN CONFORMATION HD EXCHANGE 1, 480 - 498

WP 480 **Hydrogen exchange Shows That Phosphorylation of c-Abl Tyr 89 Disrupts Downregulatory Intramolecular Interactions**; Shugui Chen[1]; Thomas E Smithgall[2]; John R. Engen[1]; *[1]Northeastern University, Boston, MA; [2]University of Pittsburgh School of Medicine, Pittsburgh, PA*

WP 481 **Mg^{2+} Concentration-Dependence of 70S Ribosomal-Protein Dynamics Revealed by H/D Exchange and Mass Spectrometry**; Tatsuya Yamamoto; Yoshitsugu Shiro; *RIKEN, Sayo-gun, Japan*

WP 482 **Development of a Structure Based Assay for Characterization of Synthetic Rexinoids by Use of Hydrogen Deuterium Exchange Mass Spectrometry**; LeeAnn J. Boerma; Gang Xia; Sebyung Kang; Donald Muccio; Matthew B. Renfrow; *UAB at Birmingham, Birmingham, AL*

WP 483 **Probing Conformational Dynamics of PEGylated Proteins with Hydrogen/Deuterium Exchange and Mass Spectrometry**; Rinat R. Abzalimov; Igor A. Kaltashov; *University of Massachusetts, Amherst, MA*

WP 484 **Identification of the Oligomerization Surface of the gp3 Subunit of the Bacteriophae P22 using Hydrogen Exchange**; Lisa M. Jones[1]; Daniel Nemececk[2]; Matthew B. Renfrow[1]; George J. Thomas, Jr. [2]; Peter E. Prevelige, Jr. [1]; *[1]University of Alabama at Birmingham, Birmingham, AL; [2]University of Missouri-Kansas City, Kansas City, Missouri*

WP 485 **Conformational Changes in HIV Nef upon Myristoylation as Determined by Hydrogen Exchange Mass Spectrometry**; Chris R. Morgan[1]; Purushottam Narute[2]; Thomas E. Smithgall[2]; John R. Engen[1]; *[1]Northeastern University, Boston, MA; [2]University of Pittsburgh School of Medicine, Pittsburgh, PA*

WP 486 **The Effects of Mutation and Inhibitor Binding on Abl kinase Conformation by Hydrogen Deuterium Exchange Mass Spectrometry**; Roxana E. Iacob[1]; Teodora Pene-Dumitrescu[2]; Nathanael S. Gray[3]; Thomas E. Smithgall[2]; John R. Engen[4]; *[1]Barnett Institute, NEU, Boston, MA; [2]University of Pittsburgh School of Medicine, Pittsburgh, PA; [3]Dana- Farber Cancer Institute, Harvard Medical, Boston, MA; [4]Northeastern University, Boston, MA*

WEDNESDAY POSTERS

WP 487 **Characterization of the Modular Organization of p47phox by Hydrogen/Deuterium Exchange**; Julien Marcoux [1]; Petr Man[1]; Corinne Vives[2]; Franck Fieschi[2]; Eric Forest[1]; *[1]LSMP - Institut de Biologie Structurale, Grenoble, France; [2]LPM - Institut de Biologie Structurale, Grenoble, France*

WP 488 **Conformational Analysis of the HIV-1 Viral Infectivity Factor (Vif) Protein using Hydrogen Exchange Mass Spectrometry**; Sean R. Marcsisin[1]; Dana Gabuzda[2]; K.S. Rajendran[2]; Andrew J. Brazier[2]; John Engen[1]; *[1]Northeastern University, Boston, MA; [2]Dana-Farber Cancer Institute, Boston, MA*

WP 489 **Local Unfolding of hWT and Three ALS-mutant SOD1 Apoproteins at Physiological Temperatures Monitored by Hydrogen/Deuterium Exchange Mass Spectrometry;** Armando Durazo[1]; Bryan F. Shaw[4]; Madhuri Chattopadhyay[1]; Julian Whitelegge[2]; Kym Faull[3]; Joan S. Valentine[1]; *[1]UCLA Chemistry, Los Angeles, CA; [2]University of California La, Los Angeles, CA; [3]Ucla, Los Angeles, CA; [4]Harvard University, Cambridge, MA*

WP 490 **Structural Investigation of C-Kit Tyrosine Kinase by Hydrogen/Deuterium Exchange Coupled with FT-ICR Mass Spectrometry**; Huimin Zhang[1]; Xiu Yu[2]; Michael Greig[2]; Wade Diehl[2]; Ketan Gajiwala[2]; You-Ai He[2]; Elizabeth Lunney[2]; Alan G. Marshall[1]; Mark R. Emmett[1]; *[1]Nat'l High Magnetic Field Lab, Florida State Univ., Tallahassee, FL; [2]Pfizer Global, R&d- La Jolla, San Diego, CA*

WP 491 **Probing an Integrin I Domain Structure with Enhanced H/D Exchange Mass Spectrometry (DXMS) and Differential Scanning Calorimetry (DSC)**; Sheng Li[2]; Tong Liu[2]; Paul H. Weinreb[1]; Samantha Phan[1]; Stephen Demarest[1]; Alexander Buko[1]; R. Blake Pepinsky[1]; Virgil Woods, Jr. [2]; Sharon Gao [1]; *[1]Biogenidec, Inc., San Diego, CA 92121; [2]University of California, La Jolla, CA 92093*

WP 492 **Semi-Automated Hydrogen Deuterium Exchange (HDX) for the Analysis of Dynamics and Structure of Viral Poly(A) Polymerase**; Marek Daniel Koter; Paul David Gershon; *University of California,, Irvine, CA*

WP 493 **Assembly of Matrix Protein VP40 of Ebola Virus by Hydrogen-Deuterium Exchange Mass Spectrometry**; Leslie Silva[1]; M. Javad Aman[2]; David Schriemer[1]; *[1]University of Calgary, Calgary, Canada; [2]U.S. Medical Research Inst. of Infectious Disease, Fredrick, MD*

WP 494 **Towards the Identification of the CRABP II and RAR Regions Involved in RA Transfer using HDX and Chemical Crosslinking**; Virginie Sjoelund; Igor A. Kaltashov; *University of Massachusetts, Amherst, MA*

WP 495 **How Do Infectious Bacteria Protect Themselves? H/D Exchange Mass Spectrometry Probes the Answer;** Justin B. Sperry; Craig L. Smith; Michael G. Caparon; Scott J. Hultgren; Thomas E. Ellenberger; Michael L. Gross; *Washington University in St. Louis, St. Louis, MO*

WP 496 **The Iron Binding Mechanism of Human Transferrin Examined by Hydrogen Deuterium Exchange Mass Spectrometry**; Cedric Bobst[1]; Igor A. Kaltashov[2]; *[1]University of Massachusetts, Amherst, Amherst, MA; [2]University of Massachuset, Amherst, MA*

WP 497 **Factors Affecting Hydrogen-Deuterium Exchange at the MHC-Peptide Binding Interface**; Sachin Patil; Hermann von Grafenstein; *University of Toledo, Toledo, OH*

WP 498 **Using HX-ESI-MS to Investigate the Amyloidogenic Protein Beta-2-Microglobulin in Its Monomeric State and When Bound Within the Major Histocompatibility Complex;** John P Hodkinson[1]; Thomas R Jahn[2]; Sheena E Radford[1]; Alison E Ashcroft[1]; *[1]University of Leeds, Leeds, UK; [2]University of Cambridge, Cambridge, UK*

PROTEIN QUANTITATION 3, 499 - 538

WP 499 **An Attempt to Quantitative Analysis for Clinical Proteomics by Two-Dimensional Electrophoresis and MALDI-TOF-MS using Stable Isotope-Labeled Small Organic Molecules**; Sadamu Kurono[1]; Takeshi Ueda[2]; Masayuki Maruoka[2]; Hanjoung Cho[3]; Satomi Niwayama[3]; *[1]Iberica Holdings Co., Ltd., Kurume-shi, Fukuoka, Japan; [2]Chiba Cancer Center, Chuo-ku, Chiba, Japan; [3]Texas Tech University, Lubbock, TX*

WP 500 **Combining Isotope Coded Protein Labelling (ICPL) and TiO2 Phosphopeptide Enrichment: a Novel Strategy for Quantitative Phosphoproteomics;** Nicolien FA Nagtzaam[1]; Martijn W. H. Pinkse[3]; Michael Kersten[1]; Christian Recktenwald[2]; Barbara Seliger[2]; Thomas M. Halder[1]; Peter D.E.M Verhaert[3]; *[1]Toplab GmbH, Martinsried, Germany; [2]University of Halle, Halle, Germany; [3]Delft University of Technology, Delft, The Netherlands*

WP 501 **Yeast Heat-Shock Response Studied by Label-Free Quantitative Proteomics**; Hannah Scott[1]; Hans C Dalebout[2]; Davinia J Mills[1]; Magnus Palmblad[2]; *[1]The University of Reading, Reading, UK; [2]Leiden University Medical Center, Leiden, The Netherlands*

WP 502 **Utilization of SILAC Labeling for Comparative Analyses of Protein Expression in Planktonic Versus Biofilm-Grown Bacteria**; Nancy J. Phillips[1]; Deborah M. B. Post[2]; Birgit Schilling[2]; Christopher T. Steichen[3]; Margaret R. Ketterer[3]; Jason W. Johnston[3]; Megan L. Falsetta[3]; Michael A. Apicella[3]; Bradford W. Gibson[2]; *[1]The University of California San Francisco, San Francisco, CA; [2]The Buck Institute For Age Research, Novato, CA; [3]The University of Iowa, Iowa City, IA*

WP 503 **Quantitative Proteomic Analysis of TLR Agonist-Mediated Synergy and Tolerance**; Ying Du; Yanbao Yu; Carol E. Parker; Xian Chen; *University of North Carolina, Chapel Hill, NC*

WP 504 **Quantitation of Native Catalytically Active Spliceosomal B- and C-Complexes by Chemical (iTRAQ) and Metabolic (SILAC) Labeling**; Carla Schmidt; Mads Gronborg; Jochen Deckert; Sergey Bessonov; Ira Lemm; Reinhard Lührmann; Henning Urlaub; *MPI for Biophysical Chemistry, Göttingen, Germany*

WP 505 **Absolute Quantification for Clinical-Resistant BCR-ABL Mutants from CML**; Jung Ok Park[1]; Gum Young Kang[1]; Sun Kyu Choi[3]; Dong Wook Kim[2]; Young Hwan Kim[3]; Kwang Pyo Kim[1]; *[1]Konkuk University, Seoul, South Korea; [2]The Catholic University, Seoul, South Korea; [3]Korea Basic Science Institute, Daejon, South Korea*

WP 506 **Characterization of Membrane-Bound Protein Complexes in Yeast using SILAC and Quantitative MS**; Silke Oeljeklaus; Benedikt Reinartz; Michael Kohl; Christian Stephan; Ralf Erdmann; Helmut E. Meyer; Bettina Warscheid; *Ruhr-University Bochum, Bochum, Germany*

WEDNESDAY POSTERS

WP 507 **Label-Free Comparative Proteomics of Arabidopsis Clp Protease Mutants and Absolute Quantification of Subunit Composition of the Clp Core Complex**; Paul Dominic B. Olinares[1]; Giulia Friso[1]; Boris Zybailov[1]; Andrea Rudella[2]; Verenice Ramirez-Rodriguez[1]; Qi Sun[3]; Klaas J. Van Wijk[1]; *[1]Plant Biology, Cornell University, Ithaca, NY; [2]Waters, Barcelona, SPAIN; [3]Computational Biology Unit, Cornell University, Ithaca, NY*

WP 508 **Validating and Quantifying Effects of siRNA Based RNA Interference on GAPDH at the Protein Level using Targeted Mass Spectrometry**; Sahana Mollah; Katherine Williams; Laura chapman; Richard Fekete; Joseph Krebs; Christie L Hunter; *Applied Biosystems, Foster City, CA*

WP 509 **Importance of Transmission Window Selection in Quadrupole-Based Mass Spectrometers to Increase Signal Intensities in iTRAQ-Based Quantitation**; Jesse B. Hines[1]; Maria E. Warren[2]; Carol E. Parker[2]; Xian Chen[2]; *[1]Shimadzu Scientific Instruments, Durham, NC; [2]University of North Carolina - Chapel Hill, Chapel Hill, NC*

WP 510 **Profiling Real-Time MyD88 Interactions in a TLR-agonist-Specific pathway by using iTRAQ and SILAC**; Sun Yong Jeong; Yanbao Yu; Linhong Jing; Nedyalka Dicheva; Carol E. Parker; Xian Chen; *University of North Carolina, Chapel Hill, NC*

WP 511 **Identification of Drosophila Melanogester Low Abundance Membrane Glycoproteins using Off-Line Multidimensional Chromatography-Mass Spectrometry**; Jong Hee Song [1]; David E. Clemmer[2]; *[1]SKenergy R&D Center, Daejeon, South Korea; [2]Indiana University, Bloomington, IN*

WP 512 **Comparative Quantitative Analysis of Mouse Adipose Tissue using LC-MALDI TOF/TOF and LTQ Orbitrap XL**; Dorothea Rutishauser[1]; Bernd Roschitzki[2]; Albert Johan Gerrits[3]; Peter M. Gehrig[4]; Hadi Al Hasani[5]; Ralph Schlapbach[6]; *[1]Functional Genomic Center Zurich, Zurich, Switzerland; [2]University of Zurich, Zurich, Switzerland; [3]University Zurich / Eth Z, Zurich, Switzerland; [4]Funtional Genomics Center, Zurich, Switzerland; [5]German Institute for Human Nutrition, Nuthetal, Germany; [6]Eth Zurich Fgcz, Zurich, Switzerland*

WP 513 **Direct Multiplexed Peptide Immunoaffinity-Based Quantification of Biomarkers using SISCAPA**; Eric Kuhn; Hasmik Keshishian; Veronica Saenz-vash; Michael Burgess; Terri Addona; Steven A. Carr; *Broad Institute of MIT and Harvard, Cambridge, MA*

WP 514 **Quantitative Mass Spectrometry of the Astrocyte Secretome by SILAC**; Todd M. Greco; Adrian Mak; Lynn Spruce; Steven H. Seeholzer; Harry Ischiropoulos; *Children's Hospital of Phila, Philadelphia, PA*

WP 515 **Global Quantitative Proteomic Analyses of *Nostoc Punctiforme* PCC 73102 under Diazotrophic Conditions using iTRAQ and Label-Free Techniques**; Saw Yen Ow[1]; Wolfgang Jabs[2]; Carsten Baessmann[2]; Karin Stensjo[3]; Phillip C Wright [1]; *[1]University of Sheffield, Sheffield, UK; [2]Bruker Daltonik, Bremen, Germany; [3]Uppsala University, Uppsala, Sweden*

WP 516 **Quantification of Proteome Changes in L6 cells Containing Giant Mitochondria**; Rongxiao Sa; Marian Navratil; Edgar A. Arriaga; *University of Minnesota, Minnespolis, MN*

WP 517 **Identification and Absolute Quantification of Proteins in Retina Synaptic Ribbon Preparations by UPLC and MS^E Approaches**; Karin Green[1]; William F. Sewell[3]; Craig Dorschel[2]; James E. Evans[1]; *[1]Univ. of Mass Med. Sch., Worcester, MA; [2]Waters Corporation, Ms Ct, Milford, MA; [3]Massachusetts Eye and Ear, Boston, MA*

WP 518 **High-Throughput Mass Spectrometric Quantification of Glycolytic Proteins in the Yeast Proteome**; Ronald Aardema; Henk L. Dekker; JaapWillem Back; Leo J. de Koning; Chris G. de Koster; *University of Amsterdam, Amsterdam, The Netherlands*

WP 519 **Pioneering Off-Gel Methodology for Protein Quantification using a Dual Channel (Cy3, Cy5) Laser Induced Fluorescence Detector and Nanoesi-Qq-FT-ICR ECD-MS-MS**; Caroline Tokarski[1]; Claude Netter[2]; Jocelyne Tahar[3]; Christian Rolando[1]; *[1]Univ. des Science/Tech de Lille, Villeneuve d'Ascq, FRANCE; [2]Dionex, Voisin-le-Bretonneux, France; [3]Picometrics, Toulouse, France*

WP 520 **A Facile New Protocol for Multiplexed Quantitation of Membrane Proteomes**; Andrew J Thompson; Ritchie Williamson; Emma L Schofield; John Stephenson; Diane P Hanger; Brian H Anderton; *MRC Centre For Neurodegeneration Research, London, UK*

WP 521 **Multiplexed Quantitative Proteomics Assessment of Radiation-Induced Lung Damage using ExacTag Labeling**; Xiaoping Ao[1]; Li Wang[1]; Ming Zhang[1]; Theodore S. Lawrence[1]; David M. Lubman[2]; *[1]University of Michigan Medical Center, Ann Arbor, MI; [2]University of Michigan, Ann Arbor, MI*

WP 522 **Micropreparative Liquid Chromatographic Fractionation and Differential Expression Analysis of Protein Extracts from Endothelial Cells Treated with Vascular Endothelial Growth Factors**; John FlensburG[1]; Fuad Bahram[2]; Lena Claesson-Welsh[2]; *[1]GE Healthcare Bio-Sciences AB, Uppsala, Sweden; [2]Uppsala University, Rudbeck Laboratory, Uppsala, Sweden*

WP 523 **Label Incorporation Kinetics in SILAC Cultured Rat Cortical Primary Neuron Proteins, and its Application to Amyloid-beta Toxicity Study**; Stefano Gotta; Gianluca Sardone; Davide Franceschini; Claus Andersen; Roberto Raggiaschi; *Siena Biotech SpA, Siena, Italy*

WP 524 **FLEXIQuant – a Full-Length Stable Isotope-Labeled Quantitation Method**; Sasha A. Singh[1]; Michael Springer[2]; Marc W. Kirschner[2]; Judith Jebanathirajah[1]; Hanno Steen[1]; *[1]Harvard Medical School/Children's Hospital Boston, Boston, MA; [2]Harvard Medical School, Boston, MA*

WP 525 **Analysis of Proteins in Native Cerebrospinal Fluid by Multiple Reaction Monitoring**; Yong Seok Choi; Kelvin H. Lee; *University of Delaware, Newark, DE*

WP 526 **The Development of a Targeted MRM Assay for Quantitation of Low Abundance Cytochrome P450 Proteins;** Amy Bartlett[1]; Therese Mckenna[1]; Christopher Hughes[1]; Johannes P. C. Vissers[1]; Scott Geromanos[2]; Catalin Donneanu[2]; James Langridge[1]; *[1]Waters Corporation MS Technologies Centre, Manchester, UK; [2]Waters Corporation, Milford, MA*

WP 527 **Quantitation of Protein Expression in Human IPS Cells using iTRAQ, ETD, and Beam-Type CAD on an Orbitrap Mass Spectrometer**; Doug Phanstiel; Justin Brumbaugh; James A Thomson; Joshua J. Coon; *University of Wisconsin, Madison, WI*

WP 528 **Comparison of Non-labeling Quantitative Proteomics Techniques using Ion Trap and QTOF Mass Spectrometers**; Roger Powell; Nichole Reisdorph; Rick Reisdorph; *National Jewish Medical Res, Denver, CO*

WP 529 **Quantitative MudPIT Analysis of the Eukaryotic RNA Polymerases**; Amber L Mosley; Samantha G Pattenden; Mihaela E Sardiu; Laurence Florens; Jerry L Workman; Michael P Washburn; *Stowers Institute, Kansas City, MO*

WP 530 **Identifying and Quantifying Novel Biochemical Pathways in Newly Discovered Prokaryotes**; Vibhuti Patel[1]; Andrew Crombie[1]; Konstantinos Thalassinos[1]; Joanne B. Connolly[2]; J. Colin Murrell[1]; Susan E. Slade[1]; James Scrivens[3]; *[1]University of Warwick, Coventry, UK; [2]Waters, Manchester, UK; [3]Univ of Warwick, Coventry, UK*

WP 531 **Quantitation of Tandem MS Ion Data for Hypothesis Driven Structural MS in Protein Footprinting Experiments**; Janna Kiselar[1]; Sayan Gupta[2]; Mark Chance[1]; *[1]Case Western reserve University, Cleveland, OH; [2]Cwru-center For Proteomics, Upton, NY*

WP 532 **A Two-Stage Design for Rapid and Reliable Quantitation Applied to Knock-Out Mice: Combining Shotgun and Targeted iTRAQ Measurements**; Peter Pichler[1]; Peter Hasselblatt[2]; Erwin Wagner[2]; Goran Mitulovic[3]; Gustav Ammerer[1]; Karl Mechtler[2]; *[1]Christian Doppler Laboratory for Proteome Analysis, Vienna, Austria; [2]Research Institute of Molecular Pathology (IMP), Vienna, Austria; [3]Inst. of Mol. Biotech. (IMBA), Vienna, Austria*

WP 533 **Quantitative Proteome Analysis of Lung Carcinoma Cells Performed by Label-Free and DIGE Techniques**; Barbara Sitek [1]; Gereon Poschmann[1]; Birgit Korte[1]; Sebastian Link[1]; Christian Stephan[1]; Wolfgang Jabs[3]; Daniel C. Chamrad[2]; Klaus Marquart[2]; Marina Behrens[3]; Kathy Pfeiffer[1]; Martin Blueggel[2]; Carsten Baessmann[3]; Helmut E. Meyer[1]; Kai Stuehler[1]; *[1]Ruhr Universitaet Bochum, Bochum, GERMANY; [2]Protagen Ag, Dortmund, GERMANY; [3]Bruker Daltonik Gmbh, Bremen, Germany*

WP 534 **Label-Independent Quantitative Analysis of Rat Mitochondrial Proteomes using Quadrupole Time-of-Flight Mass Spectrometry**; Rick Reisdorph [1]; Roger Powell[1]; Matthew Jackman[2]; Michael Armstrong[1]; Nichole Reisdorph[1]; *[1]National Jewish Medical and Research Center, Denver, CO; [2]UCHSC, Denver, CO*

WP 535 **Tracking the Modifications of β-cells Proteome and Transcriptome Induced by Glucotoxicity;** Yohann Couté[1]; Yannick Brunner[1]; Domitille Schvartz[1]; Feliciano Priego-Capote[1]; Céline Hernandez[2]; Ron D. Appel[2]; Jean-Charles Sanchez[1]; *[1]Biomedical Proteomics Group, Geneva, Switzerland; [2]Proteome Informatics Group, SIB, Geneva, Switzerland*

WP 536 **Quantifying Histone Variants and Modifications for Senescence by Label-Free LC-MS**; Hye R Jung[1]; Johannes P.C. Vissers[2]; Jim Langridge [2]; Lise C Rudkjaer[3]; Kristian Helin[3]; Ole N. Jensen[1]; *[1]University of Southern Denmark, odense, Denmark; [2]Waters Corporation, Manchester, UK; [3]Biotech Research and Innovation Centre, Copenhagen, Denmark*

WP 537 **Profiling of Proliferating and Differentiated Mes-c-myc A1 Cell Line from Mouse Embryonic Mesencephalon by 2D LC-MS-MS and Alternate Scanning LC-MS**; Angela Chambery[2]; Johannes P.C. Vissers[1]; Jim I. Langridge[1]; Luca Colucci-D'Amato[2]; Simona Scarpella[1]; Augusto Parente[2]; *[1]Waters Corporation, Manchester, UK; [2]Dipartimento di Scienze della Vita, Caserta, Italy*

WP 538 **MudPIT as a Tool for the Separation and Quantification of Proteins for GM Crop Safety Assessments**; Kaisa M. KoistineN[1]; Paul D. Fraser[1]; John M. Halket[2]; Raj K. P. Patel[1]; Peter M. Bramley[1]; *[1]Royal Holloway, University of London, Egham, UK; [2]King's College London, London, UK*

PROTEINS: MODIFIED, BIOLOGICAL APPLICATIONS, 549 - 566

WP 549 **Characterization of Tyrosine Nitration in Mouse 3-Oxoacid CoA-Transferase**; Yuan Wang; Liang Shi; Fuli Peng; Jianmin Shao; Ningzhi Xu; Siqi Liu; *Beijing Genomics Institute, CAS, Beijing, China*

WP 550 **Mass Spectrometric and Biophysical Investigation of a Conformational Disease "Antithrombin III Aalborg"**; Allan Stensballe[1]; Marie Thomsen[2]; Shona Pedersen[2]; Soren Risom Kristensen[2]; Daniel Otzen[1]; *[1]Aalborg University, Aalborg, Denmark; [2]Aalborg University Hospital, Aalborg, Denamrk*

WP 551 **Modification of Carbonic Anhydrase II with Acetaldehyde - The First Metabolite of Ethanol**; Janne Janis[1]; Fatemeh Ahmad[5]; Jarkko Valjakka[5]; Abdul Waheed[3]; William Sly[3]; Claudiu Supuran[2]; Onni Niemelä[4]; Daniela Vuollo[2]; Seppo Parkkila[5]; Pirjo Vainiotalo[1]; *[1]University of Joensuu, Joensuu, Finland; [2]Università degli studi di Firenze, Firenze, Italy; [3]Saint Louis University School of Medicine, St Louis, MO; [4]Seinäjoki Central Hospital, Seinäjoki, Finland; [5]University of Tampere, Tampere , Finland*

WP 552 **Application of FT-MS to Elucidate Degradation Pathways of Therapeutic Proteins**; Anne Zeck; Joerg Thomas Regula; *Roche Diagnostics GmbH, Penzberg, Germany*

WP 553 **Using Isotopic Labelling to Investigate Serum Albumin Modifications**; Klaus C Rumpel; Mireia Fernandez-Ocana; Hendrik Neubert; *Pfizer Global Research And Development, Sandwich, Kent, UK*

WP 554 **Analysis of Post Translational Modifications of the Scaffolding Protein Homer in 6 Brain Regions**; Wallace Helton [1]; Karen K. Szumlinski[2]; Christine Wu[1]; *[1]Univ. of Colorado Health, Aurora, CO; [2]Univ. California Santa Barbara, Santa Barbara, CA*

WP 555 **Systematic Investigation of Carbonylation in Human Serum Albumin**; Diogo Oliveira-Silva; David Simpson; Zafer Ugur; Scott Gronert; *Virginia Commonwealth University, Richmond, VA*

WP 556 **Characterization of an N-linked Glycosylated Kappa Urinary Light Chainfrom a Patient with Primary Systemic Amyloidosis**; Yan Jiang; Roger Thebérge; Amareth Lim; Tatiana Prokaeva; Lawreen H. Connors; Martha Skinner; Catherine E. Costello; *Boston University School of Medicine, Boston, MA*

WP 557 **Detection of Post Translational Modifications on Distinct Mediator Complexes;** Andrew Paoletti; Ronald Conaway; Joan Conaway; Laurence Florens; Michael Washburn; *Stowers Institute for Medical Research, Kansas City, MO*

WP 558 **The Analysis of Post-Translational Modification of High Mobility Group Box (HMGB) Proteins in HL-60 Cells**; Lei Xiong[1]; Yinsheng Wang[2]; *[1]Department of Chemistry, UC-Riverside, Riverside, CA; [2]University of California, Riverside, CA*

WEDNESDAY POSTERS

WP 559 **Studying the Structure of the Escherichia Coli Ribosome by Mass Spectrometry**; Xiaohui Liu; James P. Reilly; *Indiana University, Bloomington, IN*

WP 560 **Towards Comprehensive Sequence Mapping and Identification of novel Post-Translational Modifications in Human Estrogen Receptor by Tandem Mass Spectrometry**; Christian Atsriku; David Britton; Jason Held; Birgit Schilling; Crystal Berger; Gary Scott; Christopher Benz; Brad W. Gibson; Mike Baldwin; *Buck Institute for Age Research, Novato, CA*

WP 561 **Site-Specific Identification of 3-Nitrotyrosine in Platelet Proteins;** Marissa Martinez; *University of Pennsylvania, Philadelphia, PA*

WP 562 **Identification of Post-Translational Modifications of SOD-1 Purified from Control and sALS Patient Tissue**; Joshua L. Johnson[1]; Daryl A. Bosco[2]; Robert H. Brown Jr.[2]; Jeffrey N. Agar[1]; *[1]Brandeis University, Waltham, MA; [2]Mass. Gen. Hsptl. and Harvard Medical School, Boston, MA*

WP 563 **Posttransitional Modifications of Proteins Identified by LC-Mass Spectrometry**; Benlian Wang; Masaru Miyagi; Ram H. Nagaraj; krzysztof Palczewski; Mark Chance; *Case Western Reserve University, Cleveland, OH*

WP 564 **Reactions of Biogenic VOCs with Peptides and Proteins**; Simin D. Maleknia; Mark A Adams; *The University of New South Wales, Sydney, Australia*

WP 565 **Beta B2 Crystallin: Study of Glutamine and Glutamic Acid Conversion**; Xiaojuan Li; Jason J Cournoyer; Cheng Lin; Chunxiang Yao; Peter B. O'connor; *Boston University Medical School, Boston, MA*

WP 566 **Investigating the Mechanism of Bacterioferritin Co-migratory Protein, a Cysteine Dependant Peroxidase, using High Resolution Mass Spectrometry;** David J Clarke; Alan R. Brown; John R. Govan; Dominic J. Campopiano; Pat R. R. Langridge-Smith; C. Logan Mackay; *University of Edinburgh, Edinburgh, UK*

PROTEOMICS: BIOMARKER ASSAYS 1, 567 - 583

WP 567 **Improved MRM Assay Design using Previously Acquired MS-MS from Multiple Instruments;** David M Cox[1]; Anthony Hung[2]; Stephen A Tate[1]; Brigitte Simons[1]; Min Du[2]; John C McDermott[2]; *[1]MDS Analytical Technologies, Concord, Canada; [2]York University, Department of Biology, Toronto, Canada*

WP 568 **Developing Reliable MRM Assay for Protein Quantification Based on Parallel Multiplexing LC-MS-MS Analysis**; Asish Chakraborty; Catalin Doneanu; Weibin Chen; Scott Geromanos; Gordon Fujimoto; John Gebler; *Waters Corporation, Milford, MA*

WP 569 **Increasing the Range of Targeted SRM Transitions for Biomarker Quantitation: Combining SRM Building/Predicting with FAIMS Separation**; Josef Ruzicka[1]; Kevin J. Mchale[1]; Scott Peterman[1]; Amol Prakash[2]; *[1]Thermo Fisher Scientific, Somerset, NJ; [2]Thermo BRIMS, Cambridge, MA*

WP 570 **Proteomics and Novel Biomarkers in Bladder Carcinoma**; West Kassous; Jordan Steinberg; Lorne Budman; David Blank; Bernard F Gibbs; *McGill University, Montreal, Que Canada*

WP 571 **The Roles of MALDI-TOF MS Quantification and Proteomics in the Study of Anthrax Toxemia**; Adrian R Woolfitt; Anne E Boyer; Maribel Gallegos; Maria I Solano; John R Barr; *Centers for Disease Control and Prevention, Atlanta, GA*

WP 572 **A Computational Approach for the Differential Analysis of Proteomics Data Acquired by Selected Reaction Monitoring Mass Spectrometry**; Gregory Finney[1]; Kelli Kline[3]; Daniela Tomazela[2]; Christine Wu[4]; Michael J. Maccoss[2]; *[1]Univ of Washington, Genome Sciences, Seattle, WA; [2]University of Washington, Seattle, WA; [3]Univ. Colorado Hsc, Denver, CO; [4]University of Colorado, Aurora, CO*

WP 573 **Quantification of Focal Adhesion Kinase Activation Loop Phosphorylation by LC-MS as a Biomarker for *in vivo* c-Src Activity;** Eugene F. Ciccimaro[1]; Ian A. Blair[2]; *[1]University of Pennsylvania, Philadelphia, PA; [2]Univ. of Penn/center For Cancer, Philadelphia, PA*

WP 574 **Quantitative and Semi-Quantitative Analysis of Proteins from Controls' and Patients' Plasma for Biomarker Verification in Ovarian Cancer**; Umut Oguz; Yifan Huang; John Koomen; Rebecca Sutphen; *H. Lee Moffitt Cancer Center, Tampa, FL*

WP 575 **Multi-Site Phosphorylation Assays for Tau Protein and Their Relevance to Alzheimer's Disease and Other Neurological Disorders**; Malcolm Ward[1]; Mireia Fernandez-Ocana[2]; Richard Killick[2]; Diane Hanger[2]; Emma Schofield[1]; Helen Byers[1]; Simon Lovestone[2]; Brian Anderton[2]; *[1]Proteome Sciences PLC, London, UK; [2]MRC Centre for Neurodegeneration Research, London, UK*

WP 576 **Verification of lung Cancer Protein Biomarker Candidates using a Label Free Quantification Mass Spectrometric Approach**; Qinfeng Liu; Takefumi Kikuchi; Jamshedur Rahman; David Carbone; Pierre Massion; Daniel C. Liebler; *Vanderbilt University, Nashville, TN*

WP 577 **Development of a MRM-Transition Workflow and Atlas for S. Cerevisiae and Other Model Organisms**; Ashley Eastham; Li Huang; Daniel Martin; *Institute for Systems Biolog, Seattle, WA*

WP 578 **Highly Selective Enrichment of Fibrinopeptide A from Human Serum by Fe3O4@Al2O3 for MALDI MS Analysis**; Cheng-Tai Chen; Yu-Chie Chen; *National Chiao Tung Univ., Hsinchu, Taiwan*

WP 579 **Biomarker Validation using *de novo* MRM Analysis – Something Borrowed and Something New**; Devanand M. Pinto; Susanne Penny; Kenneth Chisholm; Andrej Vasilj; *NRC, Halifax, Canada*

WP 580 **Identification of Animal Furs and Feathers by MALDI-TOF Mass Spectrometry**; Thomas Elssner[1]; Wolfgang Pusch[1]; Guido Mix[1]; Klaus Hollemeyer[2]; Wolfgang Altmeyer[3]; Elmar Heinzle[2]; Markus Kostrzewa[1]; *[1]Bruker Daltonics, Leipzig, Germany; [2]Biochemical Engineering, Saarbruecken, Germany; [3]Gene-Facts, Saarbruecken, Germany*

WP 581 **Generation of Unique Protein Specific MRM Signatures; using Peptide Information from Alternate Scanning LC-MS Data to Drive MRM Development;** Therese Mckenna[1]; Amy Bartlett[1]; Christopher Hughes[1]; Kieran Neeson[1]; Johannes P.C. Vissers[1]; Scott Geromanos[2]; Catalin Donneanu[2]; James Langridge[1]; *[1]Waters, Manchester, UK; [2]Waters Corporation, Milford, MA*

WP 582 **High-Resolution Biomarker Discovery: Targeted Tandem Mass Spectrometry Methods for Quantitative Validation of Transcription Factor Candidates**; Johannes Hewel; Charanjit Sandhu; Jian liu; Vincent Fong; Andrew Emili; *University of Toronto, Toronto, Canada*

WP 583 **Quantification of Protein Biomarkers of Preterm Birth by Stable Isotope Dilution LC-MS-MS Method**; Sumit Shah[1]; Eugene Ciccimaro[1]; Kenneth Yu[1]; Samuel I Parry[2]; Ian A. Blair[1]; *[1]Univ of Penn/Center For Cancer Pharmacology, Philadelphia, PA; [2]Univ of Penn/Dept of OB-GYN, Philadelphia, PA*

PROTEOMICS: NEW APPROACHES TO INSTRUMENTATION, 584 - 603

WP 584 **Utilizing Experimentally -Generated Protein Ion Maps from Data-Independent LC-MS Acquisitions for Identifying Low Abundant Proteins in Complex Mixtures**; Roy Martin [1]; J. Will Thompson[2]; Arthur Moseley[3]; Scott Geromanos[1]; *[1]Waters Corporation, Beverly, MA; [2]Duke University, Igsp, Morrisville, NC; [3]Duke University Medical Center, Raleighdurham, NC*

WP 585 **Combining CAF Labeling, Parallel MS-MS, and Sequence Tag Searching for High Throughput LC-MALDI Protein Identification**; Yong Chen; Ansgar Brock; *Novartis-GNF, San Diego, CA*

WP 586 **Déjà vu LC-MS-MS: How to Replay an LC-MS-MS Chromatogram without Injecting the Sample Again!**; Daniel Eikel[1]; Simon J. Prosser[1]; Gary A. Schultz[1]; Reinaldo Almeida[2]; Mark Allen[2]; *[1]Advion BioSystems, Ithaca, NY; [2]Advion BioSciences Ltd., Heathersett, UK*

WP 587 **Automated Integration of Multidimensional Protein Identification Technology (MudPit) with Accurate Mass and Time Tags (AMT) Proteomics;** Vilém Guryca; Sabine Brugière; Magalie Court; Christophe Bruley; Jerôme Garin; Christophe Masselon; *CEA Grenoble, IRTSV/EDyP, Grenoble, France*

WP 588 **A Reproducible Method for Online RP/RP 2D Nanolc/MS for Analysis of Proteomic Samples**; James Murphy; Martha Stapels; Keith Fadgen; Scott Geromanos; *Waters Corporation, Milford, MA*

WP 589 **Comparison of Protein Identifications from Complex Samples by Capillary and Nanoflow LC-MS**; Christine Miller; Ning Tang; *Agilent Technologies, Santa Clara, CA*

WP 590 **A Novel Approach Enabling Dual MS-Analyses of a Single LC-Injection with Excellent Sensitivity**; Leonie F. Waanders[1]; Reinaldo Almeida[3]; Gary A. Schultz[2]; Peter Bandilla[1]; Mark Allen[3]; Matthias Mann[1]; *[1]MPI for Biochemistry, Martinsried, GERMANY; [2]Advion Biosciences, Itacka, USA; [3]Advion Biosciences Limited, Norfolk, UK*

WP 591 **Strong Cation Exchange LC Peptide Retention Time Prediction and Its Application in Proteomics**; Konstantinos Petritis; Lars J. Kangas; Navdeep Jaitly; Matthew Monroe; Daniel Lopez-Ferrer; Robert A. Maxwell; Anoop M. Mayampurath; Brianne O. Petritis; Heather M. mottaz; Mary S Lipton; David G. Camp; Richard D. Smith; *Pacific Northwest National Laboratory, Richland, WA*

WP 592 **Characterization of the Human COP9 Signalosome using a New Tandem Affinity Purification Strategy and Quantitative Mass Spectrometry**; Lei Fang; Xiaorong Wang; Phang-Lang Chen; Lan Huang; *University of California, Irvine, Irvine, CA*

WP 593 **A Novel Configuration using Silica Monolithic Column Technology to Analyze Complex Protein Mixtures by LC-MS-MS;** Sandra Chu[1]; Almut Rapp[2]; Sven Andrecht[2]; Stephen A Tate[1]; David M Cox[1]; *[1]MDS Analytical Technologies, Concord, CANADA; [2]Merck KGaA, Darmstadt, Germany*

WP 594 **Practical Applications of Top-Down Proteomics using a MALDI TOF-TOF Platform**; Kevin L. Schey; Susana Comte-Walters; Angus C. Grey; Ed Krug; John H. Schwacke; *Medical Univ of SC, Charleston, SC*

WP 595 **Strategies for Obtaining Confident Identifications in High Coverage, High Throughput LC-MS Proteomics Measurements using Hybrid FT Instruments**; Aleksey V. Tolmachev; Matthew E. Monroe; Ronald J. Moore; Samuel O. Purvine; Joshua N. Adkins; Gordon A. Anderson; Richard D. Smith; *Pacific Northwest National Lab, Richland, WA*

WP 596 **Accessing Natural Product Biosynthesis through Selective Detection of a Distinctive Post-Translational Modification in Complex Proteomes**; Paul M. Thomas; Stefanie B. Bumpus; Bradley S. Evans; Neil L. Kelleher; *University of Illinois, Urbana-Champaign, Urbana, IL*

WP 597 **Liquid Chromatography Coupled Electron Capture Dissociation in a Radio Frequency Linear Ion Trap for the Top-down Analysis of Protein Mixtures**; Takeshi Sakamoto; Naomi Manri; Hiroyuki Satake; Akihito Kaneko; Takashi Baba; *Central Research Laboratory, Hitachi, Ltd, Kokubunji, Japan*

WP 598 **The Use of 25-50 cm Long Nano Columns in LC-MS-MS Proteomics Studies for Maximized Peak Capacity and Increased Protein Identification**; Goran Mitulovic[1]; Robert Van Ling [2]; Evert-Jan Sneekes[2]; Remco Swart[2]; Karl Mechtler[3]; *[1]IMBA, Vienna, AUSTRIA; [2]Dionex Corp., Amsterdam, Netherlands; [3]Imp Research Institute of Mo, Vienna, Austria*

WP 599 **Application of Data-Independent Parallel Fragmentation for Label-Free Proteomic Analysis and Protein Characterization**; Kevin Blackburn; Michael B. Goshe; *NC State University, Raleigh, NC*

WP 600 **Folding Inhibition by Electrospray Additives for Top-Down Mass Spectrometry of Larger Proteins**; Honghai Jiang[1]; Xianglei Kong[1]; Kathrin Breuker[2]; Mahmud Hossain[1]; Fred W. McLafferty[1]; *[1]Cornell University, Ithaca, NY; [2]University of Innsbruck, Innsbruck, Austria*

WP 601 **Utilising Ion Mobility Spectrometry to Separate Precursors From Background Ions and Species with Different Charges in Automated Tandem MS Experiments**; Chris Hughes; Jim Langridge; Therese McKenna; Richard Tyldesley-Worster; *Waters MS Technologies Centre, Manchester, UK*

WP 602 **High-Speed Proteomic Signature by Swift LC-MS-MS and Label-Free Quantitation**; Pei-Yi Lin[1]; Chia-Feng Tsai[1]; Chih-Chiage Tsou[2]; Chien-Peng Wu[1]; Yi-Ting Wang[1]; Ting-Yi Sung[2]; Wen-Lian Hsu[2]; Yu-Ju Chen[1]; *[1]Institute of chemistry, Academia Sinica, Taipei, Taiwan; [2]Institute of information science, Academia Sinica, Taipei, Taiwan*

WP 603 **An Analytical Comparison of MS-MS Based Quantitation of stable Isotope Labeled Peptides on LC-ESI Qq-TOF and LC-MALDI TOF/TOF MS Platforms**; Leanne B Ohlund[1]; Michael A. Kuzyk[1]; Monica H. Elliot[1]; Derek Smith[1]; Hong Xian[2]; Allen Delaney[2]; Christie L. Hunter[3]; Christoph H. Borchers[1]; *[1]University of Victoria Genome BC Proteomics Centre, Victoria, Canada; [2]Michael Smith Genome Sciences Centre, Vancouver, Canada; [3]Applied Biosystems, Foster City, CA*

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WP 604 **Maximizing the Feature Identities and Qualities Leads to Enhanced Quantitation in a Label-Free LC-MS Profiling Experiments**; Wen Yu; Leo E. Bonilla; Mike T. Davis; Alex Taylor; Chris B. Russell; Andy Welcher; Scott D. Patterson; *Amgen, Seattle, WA*

WEDNESDAY POSTERS

WP 605 **Multidimensional Separation and Stable Isotope Labeled Proteome for Identification of Serum Biomarkers of Pancreatic Cancer;** Kenneth Yu [1]; Colin G. Barry[1]; David Austin[1]; Anil K. Rustgi[1]; Ian A. Blair[2]; *[1]University of Pennsylvania, Philadelphia, PA; [2]Univ. of Penn/center For Can, Philadelphia, PA*

WP 606 **Microcontact Printed Surfaces for Enrichment and Identification of Endogenous Cellular Adhesion Proteins**; Melanie Schroeder[1]; Richard A. Eigenheer[2]; Milan Mrksich[1]; *[1]University of Chicago, Chicago, IL; [2]Uc Davis, Davis, CA*

WP 607 **Protein Biomarker Candidates for Coronary Artery Disease from a Mouse Model of Atherosclerosis using 2D-LC-MALDI and 2D-LC-ESI Based Quantitative Proteomics**; Linhong Jing[1]; David Seo[2]; Maria Warren[1]; Nedyalka Dicheva[1]; Yanbao Yu[1]; Carol Parker[1]; Debra Schwinn[2]; Geoffrey Ginsburg[2]; Xian Chen[1]; *[1]University of North Carolina, Chapel Hill, NC; [2]Duke University, Durham, NC*

WP 608 **Normalization of Spectral Count Data using Zero-Inflated Poisson Regression**; Douglas W. Mahoney; Ann L. Oberg; Patrick S. Quint; Jonathan J. Harrington; Jeanette E. Eckel-Passow; Terry M. Therneau; David A. Ahlquist; H. Robert Bergen, Iii; *Mayo Clinic College of Medicine, Rochester, MN*

WP 609 **Comparison of Tryptic Protein Digestion and Microwave-Accelerated Acetic Acid Protein Digestion for Identification of Markers for Egg in Adulterated Foods;** Kevin J. Shefcheck [1]; Jinxi Li[2]; Catherine Fenselau[2]; John H. Callahan[1]; Steve Musser[1]; *[1]USFDA, College Park, MD; [2]University of Maryland, College Park, MD*

WP 610 **Population Based Proteomics Studies of Type 2 Diabetes**; Randall Nelson; Chad R. Borges; Paul Oran; Jason Jarvis; *Arizona State University, Tempe, AZ*

WP 611 **Inter-/Intra-Person Urinary Protein Variations and the Impact of Bariatric Surgery on Kidney Function**; Yan Zhang; Todd Kellogg; Gary Nelsestuen; *University of Minnesota, Minneapolis, MN*

WP 612 **Improving Resolution in Nanolc Separations for Proteomics and the Effect of Chromatographic Resolution on Peptide Identification;** Remco van Soest; David W. Neyer; Jia Eng Siow; Phillip H. Paul; *Eksigent Technologies, Dublin, CA*

WP 613 **From Bench to Bedside: Mass Spectrometric Identification of an Alternatively Spliced Fibronectin Domain Strongly Expressed in Neovasculature of Liver Metastases**; Christoph Rösli [1]; Alessandra Villa[2]; Dario Neri[1]; *[1]Institute of Pharmaceutical Sciences, ETH Zurich, Zurich, Switzerland; [2]Philochem AG, Zurich, Switzerland*

WP 614 **Xenobiotics Mediated Plasma Proteomics: Implications for Biomarker Discovery in Environmental Health**; Hongying Zhong; *Central China Normal Univers, Wuhan, CHINA*

WP 615 **Applications of Proteomics to Evaluate Drug-Induced Liver Toxicity**; Charlotte Ip [1]; Josef S. Ozer[1]; Raymond J. Gonzalez[1]; Denny B. Christian[1]; Frank D. Sistare[1]; William H. Schaefer[2]; *[1]Merck, West Point, PA; [2]Merck Research Labs, West Point, PA*

WP 616 **Profiling Low-Concentration Biomarkers of Human CNS Lymphoma in Cerebrospinal Fluid by Label-Free Quantitative Mass Spectrometry**; Sushmita Mimi Roy[1]; James Rubenstein[2]; Howard Schulman[1]; Christopher Becker[1]; *[1]PPD Biomarker Discovery Sciences, LLC, Menlo Park, CA; [2]University of California San Francisco, San Francisco, CA*

WP 617 **: Hexapeptide Combinatorial Library for Reduction of Dynamic Range of Serum Prior to SELDI Analysis;** Steve Roth; Fiona Plows; Vanitha Thulasiraman; Mariana Rusa; Hongmin Zhang; Steven Gu; *Bio-Rad Laboratories, Inc, Fremont, CA*

WP 618 **Discovery and Identification of Markers of Toxicity in a Multi-site, Multi-Compound Study: Selected Results from the EU PredTox Consortium**; Diane MccarthY[1]; Ben Collins[2]; Alexandra Walijew[3]; Arnd Brandenburg[4]; Stephen Pennington[2]; Jean-Charles Gautier[5]; Philip Hewitt[3]; William Gallagher[2]; *[1]Bio-Rad, Malvern, PA; [2]University College Dublin, Dublin, Ireland; [3]Merck KGaA, Darmstadt, Germany; [4]GeneData AG, Basel, Switzerland; [5]sanofi-aventis, Vitry sur Seine, France*

WP 619 **Proteome Analysis of Low Amount Clinical Samples Reveals Candidate Marker Proteins for Lung Squamous Cell Cancer**; Gereon Poschmann[1]; Anna Ulrich[1]; Barbara Sitek[1]; Bence Sipos[3]; Sebastian Wiese[1]; Christian Stephan[1]; Ann Vander Borght[2]; Bettina Warscheid[1]; Frans Ramaekers[2]; Günther Klöppel[3]; Helmut E. Meyer[1]; Kai Stühler[1]; *[1]Ruhr-Universitaet Bochum, Bochum, Germany; [2]University of Maastricht, Maastricht, The Netherlands; [3]Universitaet Kiel, Kiel, Germany*

WP 620 **N-Dimensional Grouping As a Tool for Mining Proteomic Expression Profiling Data**; Stephen A Tate [1]; Ron Bonner[1]; Devanand M. Pinto[2]; Gordana Ivosev[1]; Chris Lock[1]; Lyle Burton[1]; *[1]MDS Sciex, Concord, CANADA; [2]Nrc, Halifax, NS*

WP 621 **Computational Reassembly of Fractionated Samples for Biomarker Discovery using Accurate Mass Pattern with Limited Identity**; D. R. Mani; Jacob Jaffe; Steven A. Carr; *Broad Institute of MIT and Harvard, Cambridge, MA*

WP 622 **Development of a Fast and Simple One-Dimensional Separation Approach for the Detection of Low Abundance Plasma Proteins**; Michael Schirm; Dmitri Sitnikov; Enrique Escobar; Tam Lehuu; Chunyan Li; Joanna Hunter; *Caprion Proteomics, Montreal, Canada*

WP 623 **Evaluation of Label-Free Proteome Profiling Method for the Analysis of Formalin Fixed Paraffin Embedded Tissues**; Javad Nazarian [1]; Brian D. Halligan[2]; Mariarita Santi[1]; Tobey MacDonald[1]; Yetrib Hathout[1]; *[1]Children's Natl. Medical Center, Washington, DC; [2]Medical College of Wisconsin, Milwaukee, WI*

WP 624 **Proteomic Profiling of D-Serine-Induced Toxicity Biomarkers in Rat Urine;** Rhonda L. Pitsch [1]; Claude Grigsby[2]; Ronelito Perez[3]; Mitchell Meade[2]; Kari Green-church[3]; John J. Schlager[2]; Pavel Shiyanov[2]; *[1]HJF, Wright-Patterson AFB, OH; [2]Afrl, Dayton, OH; [3]The Ohio State Universtiy, Columbus, OH*

WP 625 **Identification of Low Abundant Proteins in Human Plasma after HPLC and Electrophoretic Fractionation**; Xinli Yang; *Brown University, Providence, RI*

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WP 626 **Large Scale Deamidation Quantification in Aged Lens Tissues**; Surendra Dasari[1]; Phillip A Wilmarth[1]; Ashok P. Reddy[2]; Lucinda J.G Robertson[1]; Srinivasa R. Nagalla[2]; Larry L. David[1]; *[1]School of Medicine, Oregon Health and Science Univ, Portland, OR; [2]Proteogenix, Portland, OR*

WEDNESDAY POSTERS

WP 627 **A Visual Programming Platform and Comprehensive Experimental Metadata Model for Diagnostic Workflows**; Maciek Sasinowski[1]; Krista Miller[1]; Jason Miller[1]; Heather Sasinowska[1]; Ryan Castillo[1]; David Coppit[1]; Dariya Malyarenko[2]; Haijien Chen[2]; Eugene R. Tracy[2]; William E. Cooke[2]; Dennis M. Manos[2]; Tina Bunai[2]; Oliver John Semmes[3]; Richard R Drake[4]; *[1]INCOGEN, Inc., Williamsburg, VA; [2]College of William and Mary, Williamsburg, VA; [3]Eastern Virginia Medical School, Norfolk, VA*

WP 628 **Data Processing Improvements in MS Peak Detection for Trace Quantitation from Accurate Mass LC-MS Peptide Maps**; Beth Gillece-Castro[1]; Marc V. Gorenstein[1]; Daniel Golick[1]; Keith Richardson[2]; Barry Dyson[2]; Scott Berger[1]; Jeff Mazzeo[1]; Thomas E. Wheat[1]; Diane Diehl[1]; *[1]Waters Corporation, Milford, MA; [2]Waters, Manchester, UK*

WP 629 **A Free MS-MS *de novo* Sequencing and Protein Identification Online Server**; Mingjie Xie[1]; Weiming Zhang[1]; Weijie Yang[1]; Weiwu Chen[1]; Gilles Lajoie[2]; Bin Ma[2]; *[1]Bioinformatics Solutions, Inc, Waterloo, CANADA; [2]University of Western Ontario, London, CANADA*

WP 630 **Computational Prediction of the Highest Responding Peptides Per Protein in Electrospray Mass Spectrometry**; Vincent A. Fusaro; D. R. Mani; Jacob D. Jaffe; Jill Mesirov; Steven A. Carr; *Broad Institute of Mit and Harvard, Cambridge, MA*

WP 631 **Validating Database Search Results of ETD Spectra**; Rovshan Sadygov; Rovshan Sadygov; *Thermo Fisher Scientific, San Jose, CA*

WP 632 **MS-Xelerator: Advanced Algorithms for LC-MS Data Processing Applied to Biomarker Discovery, Differential Analysis and Quantitative Proteomics**; Marco Ruijken; *MsMetrix, Maarssen, Netherlands*

WP 633 **Discriminative Identification of Activation and IL-4 Stimulation Effects in the Microsomal Fraction of CD4+ Cells under Th2 Cell Promoting Conditions**; Robert Moulder [1]; Jan-Jonas Filén[1]; Petri Kouvonen[2]; Tuula Nyman[3]; Riitta Lahesmaa[1]; *[1]Turku Centre For Biotechnology, Turku, Finland; [2]University of Turku / Centre For Biotechnology, Turku, Finland; [3]University of Helsinki, Helsinki, Finland*

WP 634 **IDEAL-Q: An automated Tool for High-Performance Label-Free Quantitative Analysis**; Chih-Chiang Tsou[1]; Chia-Feng Tsai[2]; Ethan Y. H. Tsui[1]; Paul C. Y. Yu[1]; Yi-Ting Wang[2]; Pei-Yi Lin[2]; Yu-Ju Chen[2]; Ting-Yi Sung[1]; Wen-Lian Hsu[1]; *[1]Institute of Information Science, Academia Sinica, Taipei, Taiwan; [2]Institute of Chemistry, Academia Sinica, Taipei, Taiwan*

WP 635 **Simplified Extensive Peptide Identification using Sequence Temperature Values and Feature Probabilities**; Sean L. Seymour; Ignat Shilov; Alpesh Patel; Wilfred Tang; Alexander Loboda; Christie L Hunter; Lydia Nuwaysir; Dan Schaeffer; *Applied Biosystems|MDS Sciex, Foster City, CA*

WP 636 **STRAP2: Reliable, Hierarchical Peak Identification for Multicomponent Mass Spectra**; Bernhard Y. Renard[1]; Marc Kirchner[1]; Ullrich Koethe[1]; Judith A. J. Steen[2]; Hanno Steen[2]; Fred A. Hamprecht[1]; *[1]University of Heidelberg, Heidelberg, GERMANY; [2]Harvard Medical School/Children's Hospital Boston, Boston, MA*

WP 637 **Calibrating E-Values for MS-MS Database Search Methods**; Gelio Alves[1]; Aleksey Y Ogurtsov [1]; Wells Wu[2]; Guanghui Wang[2]; Rong-fong Shen[2]; Yi-Kuo Yu[1]; *[1]National Center for Biotechnology Information, NLM, Bethesda, MD; [2]National Heart, Lung & Blood Institute, NIH, Bethesda, MD*

WP 638 **Automated Decoy Analysis in Proteomics Projects**; Peter Hufnagel[1]; Ulrike Schweiger-Hufnagel[1]; Gerhard Koerting[3]; Ray Sanchez[2]; Detlev Suckau[1]; *[1]Bruker Daltonik GmbH, Bremen, Germany; [2]Bruker Daltonics, Billerica, MA; [3]Protagen AG, Dortmund, Germany*

WP 639 **NIST Reference Libraries of Peptide Fragmentation Spectra: 2008**; Paul Rudnick[1]; Niksa Blonder[1]; Yuri Mirokhin[1]; Lewis Geer[2]; Dmitrii Tchekhovskoi[1]; Jeri Roth[1]; Lisa E. Kilpatrick[1]; Qian Dong[1]; Stephen Stein[1]; *[1]NIST, Gaithersburg, MD; [2]Ncbi / Nlm / Nih, Bethesda, MD*

WP 640 **Boston University Protein Identifier (BUPID): Improved Probability-Based Protein Identification using Peptide Mass Fingerprint Data**; Weiwei Tong; David H. Perlman; Catherine E. Costello; Mark E. Mccomb; *BU School of Medicine, Boston, MA*

WP 641 **Concatenated or Separate? Using Sample Bias Validation to Decide between Competing Database Search Strategies and Meta-Engines;** John T. Prince; Edward M. Marcotte; *University of Texas at Austin, Austin, TX*

WP 642 **Assessing Abundance Ratios in Large-Scale Proteomics Datasets: t-Tests, Q-Values, Variance Shrinkage and Missing Data**; Tiansong Wang[1]; Qiangwei Xia[2]; Fred Taub[1]; Gundula Bosch[1]; Murray Hackett[1]; *[1]University of Washington, Seattle, WA; [2]Emory University, Atlanta, GA*

WP 643 **ProLuCID: Using Probability and Statistical Scores to Improve Sensitivity and Specificity of CID and ETD Database Search Results**; Tao Xu; John Venable; Sung Kyu Park; Daniel Cociorva; Bingwen Lu; Lujian Liao; Johannes Hewel; Catherine C L Wong; Xuemei Han; James Wohlschlegel; John Yates; *The Scripps Research Institute, La Jolla, CA*

WP 644 **A Novel Feature Selection and Disease Classification Algorithm using Probabilistic Information of Peptide Peaks in MALDI proTOF Data**; Lin Zhang[1]; Jianqiu Zhang[1]; Yufei Huang[1]; Xiaobo Zhou[2]; *[1]University of Texas at San Antonio, San Antonio, TX; [2]The Methodist Hospital, Houston, TX*

WP 645 **New Method for the Validation of *de novo* Sequencing Results**; Lei Xin; Gilles Lajoie; Bin Ma; *University of Western Ontario, London, Canada*

WP 646 **Controlling False Discovery Rates in Large-Scale Shotgun Proteomic Studies**; Phillip A. Wilmarth; Lucinda J.G. Robertson; Larry L. David; *Oregon Health & Sciences University, Portland, OR*

WP 647 **C4-Based HPLC-MS-MS of Whole Proteins in an LTQ-Orbitrap**; Yihsuan S. Tsai; Alexander Scherl; Scott A. Shaffer; David R. Goodlett; *University of Washington, Seattle, WA*

WP 648 **DeepQuanTR: a Novel Software for the Targeted Identification of Quantitative Differences in Two-Dimensional Peptide Maps Created from Comparative LC-MALDI Experiments**; Tim Fugmann; Dario Neri; Christoph Rösli; *Institute of Pharmaceutical Sciences, ETH Zurich, Zurich, Switzerland*

SYSTEMS BIOLOGY: INTERACTIONS, 649 - 655

WP 649 **Systematic Investigation of Dose-Dependent Dynamics of a Histone H2AX-Associated Complex;** YuanYu Lee; Ling Xie; Yanbao Yu; Linhong Jing; Carol E. Parker; Xian Chen; *University of North Carolina, Chapel Hill, NC*

WEDNESDAY POSTERS

WP 650 **A Pipeline for Rapid Characterization of Human Protein Complexes Complementing esiRNA-Driven Screens;** Magno Junqueira[1]; Yusuke Toyoda[1]; Zoltan Maliga[1]; Mikolaj Slabicki[1]; Mirko Theis[1]; Frank Buchholz[1]; Antony Hyman[1]; Andrej Shevchenko[2]; *[1]Max Planck Institute, Dresden, Germany; [2]Mpi of Molecular Cell Biology And Genetics, Dresden, Germany*

WP 651 **Local Structure of Protein Interaction Networks and Protein Complexes from Rhodopseudomonas Palustris Based on Global Analysis of Protein Affinity Isolations**; William Cannon[1]; Mudita Singhal[1]; Don S. Daly[1]; Kevin K. Anderson[1]; Lee Ann McCue[1]; Ronald Taylor[1]; Denise D. Schmoyer[2]; Manesh B. Shah[2]; Julia Sharp[3]; Greg Hurst[2]; Brian S. Hooker[1]; Dale A. Pelletier[2]; W. Hayes McDonald[2]; Michelle V. Buchanan[2]; H. Steven Wiley[1]; *[1]Pacific NW National Lab, Richland, WA; [2]Oak Ridge National Laborator, Oak Ridge, TN; [3]Clemson University, Clemson, SC*

WP 652 **Mapping *in vivo* Protein-Protein Interactions and Topology using Protein Interaction Reporter Technology**; Haizhen Zhang[1]; Xiaoting Tang[1]; Gerhard Munske[1]; Chunxiang Zheng[1]; Nathan Kaiser[1]; Nikola Tolic[2]; Gordon A. Anderson[2]; James E. Bruce[1]; *[1]Washington State University, Pullman, WA; [2]Pacific Northwest National Laboratory, Richland, WA*

WP 653 **Developing Informatics Data Pipeline (IDP) Software to Decipher Transcriptional Coregulator Networks from Large-Scale Proteomic Profiling of Coregulator Complexes**; Anna Malovannaya; Rainer Lanz; Jun Qin; Bert W O'Malley; *Baylor College of Medicine, Houston, TX*

WP 654 **Identification of Protein Complexes in Rhodopseudomonas palustris**; W. Hayes Mcdonald[1]; Dale A. Pelletier[1]; Michael S. Allen[1]; Trish K. Lankford[1]; Manesh B. Shah[1]; Denise D. Schmoyer[1]; Tse-Yuan S. Lu[1]; Linda J. Foote[1]; Catherine K. McKeown[1]; Elizabeth T. Owens[1]; Greg Hurst[1]; Keiji G. Asano[1]; Jenny L. Morrell-Falvey[1]; Mitchel J. Doktycz[1]; Brian S. Hooker[2]; William R. Cannon[2]; H. Steven Wiley[2]; Michelle V. Buchanan[1]; *[1]Oak Ridge National Laboratory, Oak Ridge, TN; [2]Pacific Northwest National Laboratory, Richland , WA*

WP 655 **A High Throughput Platform to Map the Cell Cycle Interactome: Its Pitfalls with Spectral Data, Protein Identification and Data Mining**; Erwin Witters[1]; Kris Laukens[1]; Kim Henderickx[1]; Filip Lemière[1]; Dominique Eeckhout[2]; Jelle Van Leene[2]; Geert De Jaeger[2]; *[1]University of Antwerp, Antwerp, Belgium; [2]Ghent University, Ghent, Belgium*